

PASADENA CITY COLLEGE

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CATALOG 2019-2020

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PASADENA CITY COLLEGE

2019-2020 Catalog and Announcement of Courses



**Pasadena Area Community College District
Pasadena City College**

**1570 East Colorado Boulevard
Pasadena, California 91106-2003
Telephone (626) 585-7123
Web site: <http://www.pasadena.edu>**

ACCREDITATION

Pasadena City College is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges (WASC), an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education. Accreditation reports are available on the Pasadena City College website.

CAMPUS LOCATION

The Pasadena City College main campus occupies a 53-acre site centrally located in Pasadena at 1570 East Colorado Boulevard (between Hill and Bonnie Avenues). The Foothill Campus is located at 3035 East Foothill Boulevard in Pasadena. The Child Development Center is located at 1324 East Green Street, just west of the main campus. Pasadena City College Rosemead is located at 4105 N. Rosemead Boulevard in Rosemead. Courses offered through Continuing Education, the Office of Economic and Workforce Development are offered at other sites throughout the Community College District.

PASADENA CITY COLLEGE
CATALOG
2019-2020

Welcome to Pasadena City College, home of the Lancers!

On behalf of everyone in the PCC community, we are proud that you have decided to learn more about our institution. Whether you are a recent high school graduate or someone who has not set foot in a classroom for decades, we stand ready to join you on your learning journey. It is an exciting road ahead!



In ancient Rome, Lancers were in the vanguard of the armed forces, charging forward to lead the way to victory. That tradition continues at PCC today, where our Lancer ethos drives us to look constantly forward, striving toward our goal.

PCC's accomplishments speak for themselves. We are consistently ranked at the top of California's community colleges in the areas of degree achievement and career success following academic completion. For decades, students have come to our college to launch themselves into the four-year college or university of their choosing, and our Pathways, Honors, and transfer offices are just three programs that make these individual achievements possible on a grand scale.

By bringing your presence to campus you will be joining a long line of successful alumni. Among the luminaries to have come to this campus before you include baseball pioneer Jackie Robinson (Class of 1939) and esteemed educator Jaime Escalante (Class of 1971). State Supreme Court Justice Joyce Kennard (Class of 1970) distinguished herself as the first Asian American to serve on California's highest court, and filmmaker John Singleton (Class of 1985) has probed issues of race, class, and justice in films including *Poetic Justice*, *Higher Learning*, and *Boyz n the Hood*. We draw inspiration from the stories of those that came before us, and I am sure you will be similarly driven during your time here.

This catalog is your index of programs and services at our college, and I encourage you to absorb as much as you can from it. I also urge you to visit our website, www.pasadena.edu, and familiarize yourself with the resources available online and on campus. Our college stands ready to deliver the toolkit you need to simplify the business of being a student.

Thank you again for your commitment to PCC and for allowing us to serve you. Please know that my door is always open, and I look forward to learning about your story and your hopes and dreams for your future. Your success is our success, and I can't wait to see what shape that takes.

Onward Lancers!

Sincerely,

A handwritten signature in black ink that reads "Erika Endrijonas".

Erika Endrijonas, Ph.D.
Superintendent/President





THE PASADENA AREA COMMUNITY COLLEGE

DISTRICT ORGANIZATION

The Pasadena Area Community College District is composed of the communities represented by the following school districts: Arcadia, a portion of El Monte, La Cañada Flintridge, Pasadena, Rosemead, San Marino, South Pasadena, and Temple City. It is governed by an elected seven-member Board of Trustees representing the seven trustee areas and a Student Trustee elected by the student body. The Superintendent/President of the College is the chief administrative officer of the District.

BOARD OF TRUSTEES 2019-2020

Sandra Chen Lau	Area 1
James A. Osterling	Area 2
Berlinda Brown	Area 3
Hoyt R. Hilsman	Area 4
Linda Wah	Area 5
John Martin	Area 6
Dr. Anthony R. Fellow	Area 7
Alex Sarkissian	Student Trustee

COLLEGE ADMINISTRATION

Superintendent-President.	Dr. Erika Endrijonas
Assistant Superintendent/Senior Vice President, Noncredit and Offsite Campuses	Dr. Robert H. Bell
Assistant Superintendent/Vice President, Instruction	Dr. Terry Giugni
Assistant Superintendent/Vice President, Business and Administrative Services	Dr. Michael Bush
Vice President, Human Resources.	Robert Blizinski
Vice President, Student Services	Dr. Cynthia Olivo
Executive Director, Pasadena City College Foundation	Bobbi Abram
Executive Director, Institutional Effectiveness and Planning	Crystal Kollross
Executive Director, Strategic Communications and Marketing	Alexander Boekelheide
Executive Director, Economic and Workforce Development	Salvatrice Cummo



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OFFICIAL ACADEMIC CALENDAR — 2019-2020

(Dates Subject to Change)

SUMMER 2019 TERM

June 19, 2019	Summer session classes begin
July 4, 2019	Independence Day (campus closed)
August 22, 2019.....	Summer Session ends
August 22, 2019.....	Last day of Summer Intersession and officially posted graduation date

FALL 2019 TERM

August 26, 2019.....	First day of classes (16 weeks)
September 2, 2019	Labor Day holiday (campus closed)
Refer to Class Schedule	Last date to add a 16-week course. Last date to drop a 16-week course without receiving a "W"
September 13, 2019	Last day to petition for December graduation
November 11, 2019.....	Veteran's Day holiday (campus closed)
Refer to Class Schedule	Last day to drop and receive a "W"
November 28 - December 1, 2019	Thanksgiving holiday (campus closed)
December 9-15, 2019	Final Examinations
December 15, 2019.....	Last day of the semester and officially posted date of graduation for this semester
December 21, 2019 -	
January 1, 2020	Winter vacation (campus closed)

WINTER 2020 TERM

January 6, 2020	Winter session classes begin
January 20, 2020	Martin Luther King Jr. Day (campus closed)
Refer to Class Schedule	Last day to petition for Spring Graduation
February 13, 2020.....	Winter Session ends
February 14-17, 2020	Presidents Day holiday (campus closed)



SPRING 2020 TERM

February 18, 2020	First day of classes (16 weeks)
Refer to Class Schedule	Last day to add a 16-week course. Last day to drop a 16-week course without receiving a "W"
March 31, 2020	Cesar Chavez Day holiday (campus closed)
April 13-16, 2020	Spring Break – Classes not in session
April 17-18, 2020	Campus closed
Refer to Class Schedule	Last day to drop and receive a "W"
May 25, 2020	Memorial Day (campus closed)
June 8-14, 2020	Final Examinations
June 12, 2020	Commencement ceremony for all 2019-2020 graduates
June 14, 2020	Last day of the semester and officially posted date of graduation for this semester

General Information



A BRIEF HISTORY OF PASADENA CITY COLLEGE

In 1924, in response to this community's need for higher education facilities, one year of college work was added to the program offered by Pasadena High School. Soon after, another year was added. In 1928, Pasadena High School and Pasadena Junior College merged into a four-year junior college with grades 11 to 14 inclusive.

By 1946, increased enrollment justified the establishment of a second four-year junior college—John Muir. In 1947 the official names of the two schools became Pasadena City College and John Muir College.

During the school year 1953-54, the Board of Education modified the school system organization from the 6-4-4 plan to the 6-3-2-2 plan and combined the two junior colleges into a single college, Pasadena City College, to serve freshmen and sophomores. Thus, the present college is heir to the development of junior college-level work in Pasadena since 1924.

In 1966, local voters in affected communities approved a greater Pasadena Area Junior College District, effective July 1, 1967. The name was changed to the Pasadena Area Community College District on Sept. 10, 1970.

Embracing Change

PCC continues to offer state-of-the-art resources for its students and the greater Pasadena-area community. With voter-approved Measure P bonds totaling \$150 million, PCC constructed a two-story Bookstore, Industrial Technologies Building and parking structure, as well as renovated the two-story Campus Center to add a WiFi Lounge and new dining areas. PCC also constructed a 69,000 square-foot Center for the Arts facility, which houses an art gallery, recital hall, and theater. It also serves as the home of the Divisions of Performing and Communication Arts and Visual Arts and Media Studies.

PCC has made unique contributions to its community over the years. Albert Einstein dedicated the Observatory on campus. PCC's Registered Nursing program, founded in 1953 as one of only five pilot programs in the nation, continues to address the need for qualified nurses in California. The Artist-in-Residence program, which brings prominent professionals to work with and teach PCC students is offered regularly.

Career education and academic programs have evolved with the times, supporting the development of radio and television, filmmaking, dentistry, computer science, journalism, business, industrial and consumer-product design, manufacturing, home inspection, military and aviation science, music, fashion technology, and much more.

The Community Education Center showcases the College's commitment to career education and basic skills education. Similarly, the PCC Child Development Center has strengthened PCC's involvement in early childhood education.

A Gateway to Education

PCC actively fosters partnerships with other institutions of higher learning. The Teacher Preparation Program at PCC creates educational pathways to California State University, Los Angeles; University of California, Riverside; Mount St. Mary's; and Pacific Oaks. This program helps students earn both a bachelor's degree and teaching credential within four years. The Transfer Center at PCC now welcomes more than 100 public and private colleges to campus each year. The Center's FAST TRACK program also helps high school students enroll in PCC classes in order to accelerate their transfer to four-year institutions.

The College is a recognized national leader in education and innovation. PCC has been honored twice as a finalist for the prestigious Aspen Prize for Community College Excellence, given to the top ten two-year institutions in the nation. Other honors include the National Bellwether Award for Innovation from the Community College Futures Assembly, the California Community Colleges Chancellor's Student Success Award for the First Year Pathways program, and the National Tutoring Association Award of Excellence.

For more information about the history and evolution of Pasadena City College, visit the college website at www.pasadena.edu.

MISSION OF THE COLLEGE

Pasadena City College is an equity-minded learning community dedicated to enriching students' academic, personal, and professional lives through an array of degree and certificate programs, campus engagement, and customized student support.

At Pasadena City College we serve our students by:

- Providing courses and programs in a variety of instructional modalities that reflect academic excellence and professional integrity;
- Fostering a dynamic and creative learning environment that is technologically, intellectually, and culturally stimulating;
- Challenging our students to participate fully in the learning process and encouraging them to be responsible for their own academic success;
- Respecting them as individuals who may require diverse and flexible learning opportunities;
- Supporting organizational practices that facilitate student progress towards their goals; and

- Encouraging and supporting continuous learning and professional development in those who serve our students: faculty, staff, managers, and administrators.

INSTITUTIONAL CORE VALUES

As an institution committed to successful student learning in an environment of intellectual freedom, Pasadena City College is guided by the following essential, enduring and shared values:

A PASSION FOR LEARNING

We recognize that each one of us will always be a member of the community of learners.

A COMMITMENT TO INTEGRITY

We recognize that ethical behavior is a personal, institutional and societal responsibility.

AN APPRECIATION FOR DIVERSITY

We recognize that a diverse community of learners enriches our educational environment.

A RESPECT FOR COLLEGIALITY

We recognize that it takes the talents, skills and efforts of the entire campus community, as well as the participation of the broader community, to support our students in their pursuit of learning.

A RECOGNITION OF OUR HERITAGE OF EXCELLENCE

We recognize that we draw upon the College's rich tradition of excellence and innovation in upholding the highest standard of quality for the services we provide to our students and community.

PASADENA CITY COLLEGE GENERAL EDUCATION OUTCOMES

1. Communication: Use creative expression to communicate acquired knowledge or skills effectively.

Competencies:

1.1 Reading: Read and comprehend written material critically and effectively at the appropriate program level.

1.2 Writing: Write in a clear, coherent, and organized manner, at the appropriate academic level, to explain ideas; to express feelings; and to support conclusions, claims, or theses.

1.3 Listening: Listen actively, respectfully, and critically.

1.4 Creative Communication: Create or communicate through speech, music, art and/or performance.

2. Cognition: Use critical thinking skills to observe, analyze, synthesize, and evaluate ideas and information.

Competencies:

2.1 Problem Solving: Identify and analyze real or potential problems and develop, test, apply, and evaluate possible solutions, using the scientific method where appropriate.

2.2 Critical Thinking and Application: Formulate and apply knowledge, skills, ideas, and concepts to appropriate contexts.

2.3 Quantitative Reasoning: Apply appropriate mathematical concepts and methods to understand, analyze, and explain issues in quantitative terms.

3. Information Competency: Use research and technical skills effectively and ethically to achieve an objective.

Competencies:

3.1 Information Literacy: Locate, retrieve, and evaluate information using appropriate research tools.

3.2 Research Proficiency: Conduct research and present findings effectively and ethically including the use of correct source citations.

3.3 Technological Literacy: Apply technology effectively to locate, evaluate, interpret, organize, and present information using appropriate research tools.

4. Social Responsibility: Demonstrate sensitivity to and respect for others.

Competencies:

4.1 Respect for Diversity: Demonstrate an understanding of the beliefs, opinions, and values of other people and cultures.

4.2 Effective Citizenship: Demonstrate an understanding of the requirements for being an informed, ethical, and active citizen of the local community, California, the nation, and the world.

5. Personal Development: Demonstrate an understanding of practices that promote physical, psychological, and emotional well-being.

Competencies:

5.1 Awareness of Mind and Body: Demonstrate knowledge and practices that promote a sense of self as an integrated physiological, psychological, and social being.

5.2 Aesthetic Appreciation: Show an informed appreciation for artistic and individual expression.

FUNCTIONS OF THE COLLEGE

GENERAL EDUCATION

General education provides students with the knowledge, attitudes and skills needed to be effective individuals in our society. Pasadena City College has established graduation requirements that are intended to achieve the objectives of general education. In addition to class work, students are also encouraged to participate in student government, public and departmental forums, media presentations, concerts, art gallery exhibits and other College-sponsored events.

COLLEGE TRANSFER

Students may qualify for transfer with Junior status to an accredited college or university if they follow the lower division pattern of study required of them by the four-year institution, and transfer with a minimum of 60 transferable units. Acceptance to a particular college or university depends upon conditions at the four-year institution, which are subject to change.

CAREER EDUCATION

Career Education supports the expansion of area businesses and industries, and economic growth in the community by promoting educational programs, training, and services that contribute to a quality workforce.

PCC's many career programs prepare students for entry-level employment, as well as upgrading occupational skills for those already employed. The curricula are developed in coordination with industry advisory committees that provide input to ensure the training is consistent with industry standards. Responsibilities also include coordination of articulation between PCC's occupational programs and area high schools. The office administers federal programs for career and technical education and job training and man-

ages special grants and projects related to occupational programs and economic development services.

See Section V for a list and details of PCC's CTE programs.

NONCREDIT EDUCATION

The College offers a variety of courses to meet the needs of students who do not desire or need to obtain college unit credit. The Community Education Center offers noncredit (state funded) classes. The PCC Extension Program offers individuals not-for-credit, fee-based classes. These classes are open to the community and are designed to provide learning opportunities, for personal interest, cultural enrichment, and recreational enjoyment.

COMMUNITY EDUCATION CENTER

The Community Education Center (CEC), provides noncredit education, training, and services designed to continuously improve California's workforce in programs such as Business Development, Small Business Development and Entrepreneurship. Additionally, vocational, technical, and academic courses in such areas as Adult High School Diploma program, General Education Development (GED), Business Office Systems, English as a Second Language (ESL), Vocational English as a Second Language (VESL), Adult Basic Education (ABE), Parent Education, enrichment classes for seniors and disabled students, and a wealth of support programs are offered at the CEC and several community-based locations. The College Health Sciences/Nursing and Cosmetology credit-based programs are also offered at the CEC.

The Community Education Center is a satellite, off-site center, with shuttle services to and from the Colorado Campus every 20 minutes. It is located at 3035 East Foothill Boulevard, Pasadena, CA, 91107. For more information, call (626) 585-3000.

NOT-FOR-CREDIT EDUCATION AND CONTRACT EDUCATION

PCC COMMUNITY SERVICES CLASSES

The PCC Extension Department offers community services classes for professional development and personal enrichment. Professional development training programs and certificate courses focus upon skill building, workforce productivity and career exploration. Community services classes are taught in classrooms and also offered online and online, are fee-based, self-supporting, and open to the community. The PCC Extension Department is located at

3035 East Foothill Boulevard, Pasadena, CA 91107.
For more information or to register go to pcclearn.org
or call (626) 585-7608.

CONTRACT EDUCATION

PCC Contract Education, part of the PCC Extension Department, makes available to business entities customized training programs, as well as classroom and online workforce training solutions, skill building, and career advancement for employees. For further information call (626) 585-7608.

PASADENA CITY COLLEGE FOUNDATION

Incorporated as a nonprofit, charitable, public-benefit foundation in 1979, the Pasadena City College Foundation exists to support the growth and development of Pasadena City College.

The PCC Foundation raises money, accepts donations, is the beneficiary of bequests, realizes interest income, and accepts designated in-kind gifts all of which benefit the college and enable it to better serve the students of the Pasadena Area Community College District.

The Board of Directors of the PCC Foundation is composed of citizens from the community and representatives of the college. The PCC Foundation is organized as a 501(c)(3) charity. For further information, please call (626) 585-7065.

DISCLAIMER

Pasadena City College has made every reasonable effort to determine that everything stated in the *Catalog* is accurate. Courses offered, together with other matters contained herein, are subject to change without notice by the administration of Pasadena City College for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the college. The college further reserves the right to add, amend or repeal any of their rules, regulations, policies and procedures, consistent with applicable laws. The college reserves the right to change any provision in this *Catalog* at any time, with or without notice.

CATALOG

The *Catalog* provides students with the necessary information for planning their course of study. The *Catalog* is available online at: www.pasadena.edu.

The *Catalog* is available in alternate formats (Braille, enlarged text, e-text, etc.). Please contact the Disabled Student Programs and Services at (626) 585-3174 or Room D209.

PASADENA CITY COLLEGE
CATALOG
2019-2020

Admissions and Registration



SECTION I

ADMISSIONS AND REGISTRATION

STUDENT SUCCESS AND SUPPORT SERVICES

PCC promotes student success by providing support throughout the student's time at the college through the matriculation process. Beginning Fall 2014, all first-time freshmen shall be provided and participate in mandated core services as outlined in Senate Bill 1456, The Student Success Act of 2012.

Students who complete all three activities will receive priority registration. Please see below for more information on possible exemption from services and how they impact registration priority. Appeal processes are available through the Associate Vice President of Student Affairs.

Orientation ➤ Placement ➤ Plan

1. **Orientation:** an introduction of PCC and the various programs and support services available.
2. **Placement:** PCC is no longer using placement tests as the primary method of assessing students for their knowledge and understanding of certain subjects. Due to changes in state law AB1805, the college will assess most students on the basis of their U.S. high school GPA and transcripts. Placement through a multiple measures process helps ensure students register for math, English, and other courses that are an appropriate starting point. Placement can also occur with use of courses previously completed at other colleges and universities. Visit the Prerequisite Office for support with this.
3. **Education Plan:** a tool to keep students on track developed through the collaboration of student and counselor and tailored for the unique goals of each student.

Orientation	Start here!	https://www.pasadena.edu/orientation
Placement	Preparation and instructions or scheduling placement are available on the website.	https://pasadena.edu/placement
Educational Plan	<p>Students can complete an abbreviated (1-2 semester) educational plan in New Student Counseling Group Sessions or with a counselor.</p> <p>A more comprehensive plan (from start to goal) can be developed through workshops, counseling courses, or in one-on-one appointments with a counselor.</p>	https://pasadena.edu/academics/support/counseling/index.php

Appeal processes are available through the Dean of Counseling & Student Success Services.

Who Participates?

All incoming students are encouraged to complete the three Student Success activities. We believe these activities enrich the student experience for anyone entering the college whether for the first time or after an absence. Depending on your background and educational goals, you may be exempt from some parts of the process; however, students choosing to be exempt from one or more of the activities are not considered to be “matriculated”, and are not eligible for priority registration.

Students who meet one or more of the following criteria may consider exempting themselves from one or more Student Success activity as noted:

1. I have completed an associate degree or higher;
2. I am enrolled at the college for a reason other than career development or advancement, transfer, attainment of a degree or certificate of achievement, or completion of a basic skills or English as a Second Language course sequence;
3. I have completed these services at another community college within a time period identified by the district (documentation required);
4. I have enrolled at the college solely to take a course that is legally mandated for employment as defined in section 55000 or necessary in response to a significant change in industry or licensure standards.
5. I have enrolled at the college as a special admit student pursuant to Education Code section 76001. (c) Any student exempted pursuant to this section from orientation, assessment, counseling, advising, or student education plan development shall be notified that he or she is covered by an exemption and may be given the opportunity to choose whether or not to participate in that part of the services.

Assessment Services

Assessment Services administers a variety of tests, inventories, surveys, and other assessment instruments to provide current information about student achievement, abilities, and skills. Assessment testing is offered in the areas of Chemistry, English, English as a Second Language (ESL) and Mathematics. Our goal is to assist students and their counselors in making course selections by providing accurate information on a student's current preparation through the use of multiple measures. Services also include competency testing in English and Mathematics for the A.A. and A.S. degrees. Assessment services are available for admitted and currently enrolled students.

Who Must Take the English or ESL and Math Placement Exams?

Students that graduated from high school more than 10 years ago, English as a Second Language Students and International Students (On F1 Visa). All other students will be placed into courses based on their High School GPA and Grades.

When you apply for admission to PCC, your information will be collected to determine your English and Math course placement. Your course placements will be discussed during your counseling session. If you have questions please speak with the Counseling Office at 626-585-7251. Visit <https://pasadena.edu/academics/support/counseling/academic-planning/placement.php> for additional information.

Importance of Assessment Exam: Taking an assessment exam is very important because it will assist students and counselors in identifying the appropriate level of Chemistry, English, ESL, and Math courses they should enroll in at PCC. Students should review *before* taking a placement exam so they can become familiar with the exam format and what to expect on the exam. Review materials are available on the Assessment website at www.pasadena.edu/placement.

Items to Bring For Assessment

New and Returning Students

1. A valid photo ID (driver's license, State ID, high school ID, passport, etc.).
Please note: no photocopies of identification will be accepted.
2. LancerPoint ID #
3. Pencil

Continuing Students

1. PCC LancerPoint ID Card
2. Pencil

Policies

Course Enrollment Policy

The assessment exams are designed for initial placement in a course sequence for Chemistry, English, ESL and Math courses. Once a student is enrolled in the course, the professor's evaluation and grade will determine whether or not a student advances to the next level. **Students may not retest to challenge or skip a course in a sequence.**

Retest Policy

The exams may be retaken after 2 weeks and every primary term (fall and spring) if you have not started the English, ESL and Math course sequence per division policy.

Assessment and Counseling

If you are in good standing, are not enrolled in pre-collegiate basic skills courses, are not seeking admission to a selective program, and meet either one of the following criteria, you are exempt from both the counseling, advisement and assessment components:

1. Have a bachelor's or higher degree from a regionally accredited educational institution; or
2. Have an educational goal of "educational development/personal development/interest" **AND** enroll in courses with no prerequisites **AND** enroll in 6 units or fewer.

Testing

Assessment testing may be waived if you have a recent (taken within one year) comparable or equivalent test score which the College accepts. Please present documentation of test scores to the Assessment Office for consideration.

Optional Initial Placement in Courses

Although assessment exams are offered, students seeking initial placement in a sequence of courses are strongly advised to participate in the assessment process, in which a counselor will help evaluate skills, experience, aptitudes, and motivation. Based on information such as the student's goals, high school grades, test scores, work experience, and other measures, the counselor will recommend placement at the level which meets the student's needs and in which he or she has a reasonable chance of success.

Prerequisite/Corequisite Enrollment Limitation

What are Prerequisites?

A prerequisite is a specific level of preparation that students must demonstrate before taking certain courses. In most cases, either assessment results or a course from PCC or another community college will satisfy the prerequisite requirement. Courses must be completed with a minimum grade of "C" to satisfy the prerequisite requirement. Students must present documentation of having completed a prerequisite course at another college, to the Prerequisite Office prior to registration. If the prerequisite course was taken at PCC, the prerequisite requirement will be automatically cleared.

Challenge Process

A student may file the "Pasadena City College Prerequisite/Corequisite/Enrollment Limitation Challenge," with supporting documentation, if he or she believes one or more of the following:

1. The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite.

2. The student will be subject to undue delay in attaining his/her educational goal because of the enrollment limitation or because the prerequisite or corequisite course has not been made reasonably available.
3. The prerequisite, corequisite, or limitation on enrollment has not been established in accordance with applicable PCC policies and procedures.
4. The prerequisite or corequisite is in violation of Title 5, Sections 55002 and 55003 of the California Code of Regulations.
5. The prerequisite, corequisite, or enrollment limitation is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner.

Challenge forms are available on the PCC website at <http://pasadena.edu/academics/support/counseling/academic-planning/prerequisite-clearance.php>, in the Counseling Office (room L104) or the Prerequisite Office (L103D). The student bears the initial burden of showing that grounds exist for the challenge. The challenge will be resolved in a timely manner, and if it is upheld, the student will be permitted to enroll in the course or program in question, provided that space is available. It is to the student's advantage to file the form early to retain as much registration priority as possible. **The student should review the challenge form itself for more detailed information and required procedures.**

Please bring the form to the Prerequisite Office, L103D, or fax it to (626) 585-7187 with the appropriate documentation. Forms received without documentation will be denied.

New Student Group Counseling (Develop a Student Educational Plan)

The third and final Student Success activity for new students is to attend a New Student Group Counseling session. This three-hour session with counselors will prepare you to select courses for your first semester, start your Student Educational Plan, learn more about Financial Aid and the importance of academic progress, about the resources available to you on campus and more. Schedule your Group Counseling session on the college website at: <http://pasadena.edu/academics/support/counseling/academic-planning/new-students.php> or contact the counseling Office in L104. Email questions to counselingdesk@pasadena.edu.

ADMISSIONS

Scholastic Requirements for Admission

Students who are high school graduates or the equivalent (GED, California High School Proficiency Examination),

or who are 18 years of age or older and can profit from the instruction offered, may attend Pasadena City College. Certain two-year curricula have special admission requirements (See Curriculum section). Students who are under 18 but have graduated from high school or earned the equivalent (GED, CHSPE) must provide documentation of high school completion to the Admissions Office. Acceptable proofs include a high school transcript with graduation date posted (official or unofficial), GED completion certificate that certifies completion of all areas, or the certificate of completion from the California High School Proficiency Exam.

Application for Admission

All prospective students must submit a completed and signed admissions application. The application is available online through the college website (<http://pasadena.edu/get-started/>) and in paper format for applicants under age 13 or who are unable to complete the online version. Returning students with a lapse of two consecutive primary terms (Fall and Spring semesters) must submit a new application. Once submitted, the application and any submitted supporting documents become the permanent property of the College and will not be returned to the applicant.

- a. Each person is expected to complete and sign his or her own application, and to provide true and accurate information. Deliberate falsification of information may result in disciplinary action.
- b. Each person will be classified as a resident or non-resident for admission and tuition purposes based on the admissions application. (See BP 5015, AP 5015, BP 5020 and AP 5020 for information on residency determination and non-resident tuition.)
- c. Persons who possess or are applying for an F1 or M1 student visa may only be admitted upon submission of a completed International Student Application packet. Holders of F1 or M1 student visas must be classified as non-residents for tuition purposes.
- d. Specific admission requirements and limitations apply to minors who are concurrently enrolled in a K-12 school, and those who are no longer attending a K-12 school. See AP 5011 for more information on admission of minors to the college.

Applications generally open on or about October 1st for Winter and Spring terms, December 1st for Summer and Fall terms. Consult the college website for exact dates. Once an application is processed, students will receive an email providing their Lancer ID number and instructions for activating their Lancerpoint account and college email. This is a critical step for all students to complete

as information regarding their financial aid, academic standing, waitlisted classes, registration issues and more are communicated only through Lancerpoint and PCC email.

First-time students are encouraged to complete the Student Success activities of online orientation, check their placement results or complete assessment if needed, and New Student group counseling in order to receive an early registration appointment. First-time students includes recent high school graduates even though they may have taken classes at PCC while in high school, and others who are age 18 or older and have never attended Pasadena City College even if they have attended other colleges or universities (first time transfer students). Please see "Student Success and Support Services" at the front of this section for more information.

Returning students are former Pasadena City College students who have not attended in a year or more. Returning students need to reapply for admission, will receive the email verifying their Lancer ID and providing instructions to reactivate their Lancerpoint account and college email. They may also need to complete one or more of the three Student Success activities if those activities were not completed in the past or if their assessment test results have expired.

Concurrent Enrollment Students

Pasadena City College may admit minors who demonstrate through an assessment using multiple measures that they can benefit from advanced scholastic and/or career technical education to take college-level courses that are not available through their primary school or other alternatives. Minors may be permitted to take college courses under very specific circumstances and in most cases are expected to also maintain minimum day attendance at a K-12 school.

All K-12 students seeking to attend Pasadena City College as concurrent or dual enrollment students must do the following:

- a. Apply online for admission to the college; except that students age 13 and under must submit a written application for admission to the college Admissions and Records office;
- b. Submit all required completed, signed "Recommendation for Admission of Selected Students" paperwork to the Admissions and Records Office at Pasadena City College or one of its instructional sites prior to registration;
- c. Submit a current high school transcript with the "Recommendation for Admission" paperwork;
- d. Registration for K-12 and other young students occurs after DSPS, EOPS, Veterans, continuing and new and returning students have registered.

- e. The per-unit enrollment, health, and student representation fees will be waived for all K-12 and other young students who are enrolled in 11 or fewer units in any one term. Nonresident tuition and materials fees (if applicable) are not waived; however, students may be eligible for exemption from payment of nonresident tuition pursuant to the provisions of California Senate bills SB 149 and SB 150. Contact the Admissions and Records Office for more information and the petition forms.

Students admitted under this provision are subject to the same college regulations, policies and procedures that apply to regularly enrolled community college students, including but not limited to standards for attendance and scholarship. Courses attempted, units and grades earned will be recorded in an official student record.

Students admitted under this provision are not eligible to receive Title IV Federal Financial Aid. See AP 5011 for more information regarding the admission of minors for concurrent or dual enrollment.

Open Enrollment Policy

It is the policy of Pasadena City College that, unless specifically exempted by statute, every course supported by state funds shall be open for enrollment to any person who has been admitted to the College, except that students may be required to meet prerequisites established pursuant to Title 5 of the California Code of Regulations (Sections 55200-55202).

Each class is allowed a maximum number of students which is based on the special nature of the course and/or physical limitations of the facilities. Whenever pre-enrollment in such a class reaches this number, the class is designated as "closed." Admission to the College does not guarantee space in any class.

Many, not all, classes have Wait Lists. Students may choose to be placed on a Wait List when registering for the term. If a space in a closed class opens prior to the start of the class, waitlisted students are contacted by email in priority order based on the date they registered on the wait list, and advised to enroll in the class within 48 hours from the time the email was sent. If the 48-hour window is missed the student will be removed from the Wait List. Students remaining on the Wait List must attend the first class meeting to find out if space becomes available. If so, students obtain an Add Code from the instructor and add/register for the course prior to the late add deadline.

Counseling – Room L104, (626) 585-7251

The PCC Counseling Department is focused on student success. Students have access to the counselor of their

choice. Each counselor is well-informed in fields such as art, business, engineering, liberal arts, life sciences, mathematics, music, kinesiology, physical sciences, social sciences, and Career & Technology Education. Counselors can advise students in developing educational goals and selecting appropriate courses to achieve that goal. In addition, counselors also support student success by connecting them to resources and supports as they progress through their education. They interpret tests and analyze interests, abilities, challenges and successes. Although counselors assist in long-range planning and in checking specific requirements, the responsibility for meeting graduation requirements, course prerequisites or requirements for transfer to other colleges or universities is one which must be assumed by each student. In the counseling offices, as well as the College Library and the Transfer Center, students have access to a reference library of catalogs from various colleges and universities.

Services: New Student Counseling Group, Back2Success Workshops, Counseling Courses, One-on-One Appointments, Drop-In Counseling, Preliminary Transcript Evaluation, Graduation, Transfer, Career, Resources, Online Counseling,

REGISTRATION

All students receive a registration date. Students register online with LancerPoint. For information concerning the registration process, consult the current semester schedule of classes which is available within the LancerPoint system.

Registration Priority

Registration priority is determined by numerous factors as identified in Board Policy and Administrative Procedure 5055, which can be accessed through the college website. Students who are on two consecutive terms of probation, or who have completed 100 or more units at PCC (not counting ESL and basic skills classes in math and English) will lose registration priority but may appeal to reinstate it. The petition for Reinstatement of Enrollment Priority may be downloaded from the website Petitions page, and submitted to the Admissions and Records Office.

Adding Courses

Students may add courses only during the course official registration and late add periods, subject to Course limitation and restrictions, by following required procedures.

Dropping Courses

A student may drop courses during the course official "Drop" period. Courses dropped prior to course census date will not appear on the student transcript and are eligible

for a refund whereas, courses dropped after census date will appear on the student transcript with a "W" and are not eligible for a refund. All withdrawals/drops must be initiated prior to the end of the 12th week of a full term course. The final drop deadline for short-term classes falls at 75% of the total number of class meetings (e.g. for a class that meets a total of 16 times, the final day to drop falls on the day of the 12th class meeting). Specific deadline dates are available in the Schedule of Classes at www.pasadena.edu. **It is the student's responsibility to officially drop courses he/she is no longer attending. Students must clear all obligations to the college prior to withdrawal. If a course is not officially dropped, the student may receive an "F" for the course.**

Withdrawal from a class after the drop deadline (late withdrawal) may be authorized in the event of extenuating circumstances. Extenuating circumstances are verified cases of accidents, illnesses, or other circumstances beyond the control of the student. Should a verified condition require a withdrawal after the final drop deadline, a student may petition to the Admissions and Records Office. Petitions will be considered based on the submission of verifiable documentation in support of the extenuating circumstances, and the dates of the circumstances must be relevant to the term and date for which a late withdrawal is requested.

Military withdrawals shall be authorized when a student who is a member of an active or reserve United States military service receives unexpected orders compelling a withdrawal from courses. A copy of the orders must be submitted to the Admissions and Records office. Military withdrawals shall not be counted in progress probation and dismissal calculations.

Academic or Administrative Drop

- a. **Drop for Absenteeism** – Students who fail to attend the first class meeting are considered "no shows" and may be dropped. Excessive, continuous or cumulative absence (defined as 1/9th or 11% of the total number of class meetings) may also result in being dropped. Three tardies (late arrivals) may be considered the equivalent of one absence. Students must make arrangements with instructors prior to any planned absences from class.
- b. **Drop for Unsafe Performance** – A student whose classroom, clinical, or laboratory actions are dangerous to the health or welfare of the student or other persons may be dropped from the class.
- c. **Drop for Unsatisfactory Conduct or Citizenship** – A student may be dropped from class for unsatisfactory conduct or citizenship related to the class. This includes, but is not limited to, conduct in a classroom or other setting such as

a laboratory, clinic, or work station. Unsatisfactory conduct or citizenship includes, but is not limited to, cheating, plagiarism, other forms of academic dishonesty, flagrant violation of instructor direction, and actions disruptive to the on-going teaching and learning process.

A student subject to class drops for condition(s) noted in (b) or (c) above will be counseled by the instructor and the school dean and given a chance to improve, except when the violation is so flagrant that immediate suspension from class is in order.

If a student is counseled for improvement but there is insufficient improvement in the judgment of the instructor and the dean, or if immediate suspension appears to be in order, a signed class drop form and a written report on the incident will be submitted to the Director of Admissions and Records. The Director of Admissions and Records will obtain and review information available and take action deemed appropriate. The Director of Admissions and Records will inform the student of due process rights if the class drop or other discipline is imposed.

Continuous Enrollment

For purposes of meeting enrollment priority, graduation requirements, IGETC or CSU General Education Certification, continuous enrollment is defined as attending PCC at least one semester during each academic year without missing two consecutive semesters.

- Attendance for this purpose is defined as being enrolled in at least one class in a Fall or Spring term on the census date for which a grade (A-F, P, NP, MW, EW or W) is posted.
- Students who miss two or more consecutive semesters must reapply for admission and will be considered returning students for purposes of enrollment priority.

Change of Address

Any changes in contact information must be reported immediately. Update contact information online through your LancerPoint account. Students must go to the Admissions and Records Office (L113) to change their permanent address. Proof of current address must be provided.

Study Load Regulations Maximum Load

Full-time students are expected to carry 15 units per semester for normal progress. Those who would like to take more than 19.3 units per semester may submit a Special Circumstance Student Petition form to request more units online to petition@pasadena.edu or in person at the Admissions and Records Office (L113). Ordinarily,

such petitions will not be considered unless the student's cumulative GPA is 2.0 or above.

Students on probation are limited to 12 units during the Fall and Spring semesters. Such students should speak with a counselor frequently regarding progress and further program limitations.

Concurrently enrolled high school students are limited to 9 units during Fall or Spring semesters and 6 for Summer sessions.

Maximum credit in field practice or similar courses is 16 units with no more than one course enrollment per semester.

The maximum load for the Summer session is 8.3 units.

Each unit of community college work is approximately three hours of recitation, study or laboratory work per week in a semester-length course. All students are expected to devote the full time indicated above for each unit of work. Students employed part time are advised to limit their college program accordingly. It is recommended that the total of college and work hours not exceed 60 hours per week.

The following is a suggested guideline:

College Academic Load	Hours of Employment per Week
15 Units	15 Hours
12 Units	24 Hours
9 Units	33 Hours
6 Units	40 Hours

Minimum Load

The college does not specify a minimum load except when the student desires to meet certain requirements such as those below.

1. Certification that a student is attending full time. Requirement: 12 or more units in a Fall or Spring semester.
2. Full-time load to maintain status as an F-1 visa (international) student. Requirement: 12 or more units per Fall or Spring semester.
3. Eligibility to participate in California Community College intercollegiate athletics. Requirement: Be enrolled in 12 or more units during the season of competition, complete 24 units between each season of competition in that sport and maintain an overall grade-point average of 2.000. Contact the Director of Kinesiology, Health and Athletic Division or the Assistant Dean, Student Affairs, for additional California Community College and/or conference requirements.

4. Eligibility to participate in student government as an office holder. Requirement: Be enrolled in 9 or more units in the Fall or Spring semester of participation, and have an overall 2.000 grade-point average.

Summer Session Load

To determine the equivalent semester unit load for certification purposes during Summer session, multiply the number of Summer units for each course taken by 16 and divide by the number of weeks the class meets. Add the calculated equivalent units. This result may be compared to the units required during a Fall or Spring semester to determine the equivalent Summer load.

Student Classification:

Freshman, first semester: fewer than 15 units of college credit.

Freshman, second semester: at least 15 units of college credit and fewer than 30.

Sophomore, first semester: at least 30 units of college credit and fewer than 45.

Sophomore, second semester: 45 to 60 units of college credit.

PREREQUISITES, COREQUISITES, LIMITATIONS ON REGISTRATION AND ADVISORIES

PLAN AHEAD! All prerequisites, corequisites, and limitations on enrollment stated in the course descriptions listed in this *Catalog* will be strictly enforced at the time of registration. Students who do not meet the prerequisite requirements according to College records will not be permitted to register for the course. Students who believe they have met the prerequisite at another institution are strongly advised to have all transcripts of prior college work evaluated and on file well in advance of registration to minimize registration delays.

Note: Unofficial transcripts are accepted for prerequisite clearance.

Initial Placement in Courses

Students seeking initial placement in a sequence of courses are strongly advised to participate in the assessment process, in which a counselor will help evaluate skills, experience, aptitudes, and motivation. Based on information such as the student's goals, high school grades, test scores, work experience, and other measures, the counselor will recommend placement at the level which meets the student's needs and in which he or she has a reasonable chance of success.

Prerequisites/Corequisites/Recommended Preparation

A “prerequisite” is a condition of enrollment, such as successful completion of another course (with a grade of A, B, C, or P), that must be met **BEFORE** a student can register for a course or an educational program. Successful completion of a prerequisite demonstrates readiness for the subsequent course or program. By meeting the prerequisite, the student shows that he or she knows certain skills, concepts, and/or information without which the college considers success in the subsequent course or program highly unlikely.

A “corequisite” is a course in which a student is required to enroll *at the same time* that he or she is enrolled in another course. In the corequisite course, the student acquires certain skills, concepts, and/or information without which the College considers success in the concurrent course highly unlikely.

A “recommended preparation” statement in a course description means that a student is advised, but not required, to complete the identified course(s) prior to enrollment in another course or educational program. The skills, concepts, and/or information gained in the “recommended preparation” in another course or educational program will prepare students for success in the subsequent course or program.

All prerequisites, corequisites, and recommended preparation statements listed in the course descriptions are periodically reviewed. Students – especially those new to Pasadena City College – should consult the Schedule of Classes and Counseling Services for the most current information. Students are expected to meet valid and necessary course prerequisites and corequisites.

Prerequisite/Corequisite Enrollment Limitation Challenge Process

A student may file the “Pasadena City College Prerequisite/Corequisite/Enrollment Limitation Challenge,” with supporting documentation, if he or she believes one or more of the following:

1. The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite.
2. The student will be subject to undue delay in attaining his/her educational goal because of the enrollment limitation or because the prerequisite or corequisite course has not been made reasonably available.
3. The prerequisite, corequisite, or limitation on enrollment has not been established in accordance with applicable PCC policies and procedures.

4. The prerequisite or corequisite is in violation of Title 5, Sections 55002 and 55003 of the California Code of Regulations.
5. The prerequisite, corequisite, or enrollment limitation is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner.

Challenge forms are available in the Counseling Office (room L104) or the Advising Center (L103D). The student bears the initial burden of showing that grounds exist for the challenge. The challenge will be resolved in a timely manner, and if it is upheld, the student will be permitted to enroll in the course or program in question, provided that space was available at the time the challenge was filed. It is to the student’s advantage to file the form as soon as he or she becomes aware of the alleged grounds for the challenge. The student should review the challenge form itself for more detailed information and required procedures.

A link to the Prerequisite Challenge Form can be found at:

<http://www.pasadena.edu/admissions/registration/procedures/index.cfm>. Submit the completed form to Advising, L103D, or fax it to (626) 585-7187 with the appropriate documentation. Forms received without documentation will be denied.

RESIDENCE DETERMINATION

A student who does not qualify as a resident according to the policies and procedures described herein, must pay nonresident tuition at the rate per unit in effect for the term the student plans to attend. It is the student’s responsibility to read and adhere to the following rules and procedures for residence determination as set forth in the applicable laws and regulations.

A student seeking reclassification from nonresident to resident status must complete a Supplemental Residency Questionnaire (available in the Admissions and Records Office, L113) and attach legible copies of documents in support of the claim for resident status. *The questionnaire and all supporting documentation must be submitted to the Admissions and Records Office (room L113) as early as possible to avoid delays in processing. (The residence determination date for a given semester or session is the day before the semester or session opening date.)* Additional information may be required during the residency review. The burden of proof is on the student to prove that California residence has been established.

Students classified incorrectly as residents or incorrectly granted an exception from nonresident tuition are subject to reclassification as nonresidents and payment of nonresident tuition in arrears. Applications for a change in classification with respect to a previous term are not accepted.

After a final decision on residency classification is made, a student may appeal by completing a Special Circumstance Student Petition to the Director of Admissions and Records (room L113) within 30 days.

General Summary of Residency Rules

Students are cautioned that the following statement of the rules regarding residence determination is not a complete discussion of the law, but a summary of the principal rules and their exceptions. Students should also note that changes may have been made in policies, statutes and regulations between the time this information is published and the applicable residence determination date. For the text of relevant laws and regulations, refer to the California Education Code Civil Code Section 25.1 and to California Code of Regulations, Title 5.

The State of California requires the following before a student may be classified a resident for tuition purposes: (1) any applicant who has lived in California for less than two years must be required to show documentation of physical presence and actions of intent as defined herein; (2) evidence of one year's physical presence in California prior to the residence determination date; (3) evidence (in the words of the state, "objective manifestations") of one year's intent to make California the home for other than a temporary purpose (the "permanent residence") prior to the residence determination date; and (4) for any student seeking reclassification from nonresident to resident status, evidence of financial independence from any nonresident of California.

A student classified as a nonresident cannot be reclassified as a resident merely because he or she has maintained continuous attendance for one year at a California institution while paying nonresident tuition. The student must meet all three criteria of presence, intent and financial independence.

For an adult student (e.g., a student 18 years of age or older) the evidence produced in support of the claim for California residence must apply directly to the student. That is, the name of the student must appear on the documents submitted. Documentation pertaining to parents, other relatives, or friends is not sufficient. If the student's residence is legally derived from (and thus is the same as) that of another person (see below), the evidence produced must apply to that other person.

Spouses

A person's residence is not derived from that of his or her spouse; each person must establish residence separately.

Minors

The residence of a minor is determined in accordance with the following:

1. The residence of the natural or legally adoptive parent with whom an unmarried minor lives is the residence of that minor, regardless of the length of time the minor has resided with that parent. This rule applies equally to the minor child of permanently separated parents.
2. A married minor may establish his or her own residence. A minor who was married but thereafter divorced, retains the capacity to establish his or her own residence. A minor whose marriage has been annulled must be treated as an unmarried minor since for all intents and purposes a marriage has not occurred.
3. If the minor lives alone, he or she takes the residence status of the parent with whom he or she last lived.
4. If both parents are deceased and there is no court-appointed guardian, the minor may establish residence as though he or she were an adult.
5. The residence of an unmarried minor who has a parent living cannot be changed by the minor's own act, by the appointment of a legal guardian, or by relinquishment of a parent's right of control.
6. A student who has been an adult for less than a full year (e.g., one under 19 years of age) may under certain circumstances combine the immediate pre-majority derived California residence with the immediate post-majority California residence to satisfy the one year necessary for resident classification.

Meeting the Criteria of Presence and Intent

The burden is on the student to demonstrate clearly both physical presence in California and intent to establish permanent California residence. Presence and intent may be manifested in many ways - no one factor is controlling - but all those ways fall into two main categories.

1. An individual who is **19 years of age or over**, and who can provide sufficient evidence that he or she has maintained a home in California continuously for the two years prior to the residence determination date, and has not been a student during the two years, is presumed to have met the presence and intent criteria, unless the individual has taken any action inconsistent with the claim of intent as described below.

An individual who is under **19 years of age** is presumed to have met the presence and intent criteria if both the individual and his or her parents can show that they have resided in California continuously for the two years prior to the residence determination date, unless the student has taken any action inconsistent with the claim of intent as described below. Evidence of two continuous years residence of a home in California can take the same form as evidence of presence and intent as described below. However, the documents presented must show continuity over the two-year period.

2. Students who are not in the “two-year” category described above must present evidence of one year’s presence and intent. A list of acceptable items is available in the Admissions and Records Office. Some examples of such items include: California state income tax form, voter registration, driver’s license, or automobile registration; active resident membership in a California professional, service, or social organization; and utility deposit or installation receipts. The more of these items presented, and the higher their relative weight, the stronger the case for classification as a California resident becomes. All documents presented must be valid, readable, dated at least one year before the residence determination date, and properly identified with respect to student name and address.

Actions inconsistent with a claim of intent to remain a permanent California resident will be counted against that claim. Such actions include, but are not limited to, doing the following in a state other than California: registering to vote, entering into a legal agreement, attending an educational institution as a resident of the other state or maintaining a driver’s license or automobile registration in another state. In some cases, financial independence may also be considered in the evaluation of intent as indicated below.

Meeting the Criterion of Financial Independence

In addition to meeting the presence and intent criteria as outlined above, the student seeking reclassification from nonresident to resident status must show financial independence from any nonresident of California according to guidelines set forth by the State of California. In order to establish financial independence, a student seeking reclassification must show the extent to which he or she has met the following criteria for the current and each of the immediately preceding three calendar years:

1. That the student has not been claimed as an exemption for state and federal tax purposes by his or her nonresident parents;

2. That the student has not received more than \$750 from his or her nonresident parents; and
3. That the student has not lived in the home of his or her nonresident parents for more than six weeks in any given year.

Inability to prove all the financial independence criteria for the entire period will not necessarily result in classification as a nonresident if the showing of one year’s presence and intent is sufficiently strong. However, a student who is unable to satisfy all three financial independence criteria for the current and immediately preceding calendar years will be classified as a nonresident, since financial independence is of greater significance for those years. Financial independence for the second and third calendar years immediately preceding the year in which reclassification is requested will be considered together with all other relevant factors in determining intent, with no special weight attached to the financial independence factor.

Evidence of financial independence may be presented in the form of (1) affidavits signed by student and parent indicating the extent to which the three criteria listed above have been met, and (2) copies of the federal and state income tax returns filed by student and/or parent for the current and any applicable preceding calendar years.

Exceptions

There are several exceptions to the laws regarding residency. If it appears that any of these exceptions might be applicable, the student should discuss the matter with the Associate Dean of Admissions and Records or designee. In any case where an exception is claimed, proper documentation of the basis for that claim must be presented. Some of the exceptions follow:

- A. A minor student remaining in California, whose parent has established residence outside California within one year prior to the residence determination date and had legal California residence for at least one year before leaving, is entitled to resident classification until the student has attained the age of majority and has resided in the state the minimum time necessary to become a resident, so long as, once enrolled, the student maintains continuous attendance at an institution.
- B. A student under 19 years of age on the residence determination date who has been entirely self-supporting for more than one year immediately preceding that date and who can meet the regular adult presence and intent criteria outlined above is entitled to resident classification until the student has resided in the state the minimum time necessary to become a regular adult resident.
- C. A minor student is entitled to resident classification if, immediately prior to enrolling at an institution, the student has lived with and has been under the

continuous direct care and control of any adult or adults, other than a parent, for a period of not less than two years, provided that the adult or adults having such control have had legal California residence during the year immediately prior to the residence determination date. This exception continues until the student has resided in the state the minimum time necessary to become a resident, so long as continuous attendance is maintained at an institution.

- D. A student who is an adult alien is entitled to resident classification if the student has been lawfully admitted to the United States for permanent residence in accordance with all applicable laws of the United States, provided that the student has met all the legal requirements for California residence for more than one year after such admission and prior to the residence determination date. In other words, the one-year period for showing presence and intent cannot begin until the date lawful admission for permanent residence is established. (Holders of valid A, E, G, H-1, H-4, I, K, L, N, NATO, O-1, O-3, R, T, U or V visas should contact the Office of Admissions and Records or his designee regarding their residence status.)
- E. A student who is a minor alien is entitled to resident classification if both the student and his or her parent have been lawfully admitted to the United States for permanent residence in accordance with all applicable laws of the United States, provided that the parent has met all the legal requirements for California residence for more than one year after such admission and prior to the residence determination date. (Holders of valid A, E, G, H-1, H-4, I, K, L, O-1, R and V visas see note under "D" above.)
- F. A student who was admitted to the United States as a refugee, asylee or parolee and produces proper documentation of that status and who produces appropriate evidence of having met the presence and intent criteria described above may be entitled to resident classification.
- G. A student who is a full-time employee of a California public institution of higher learning or whose parent or spouse is such a full-time employee may at the option of the institution which the student proposes to attend be entitled to resident classification until the student has resided in the state the minimum time necessary to become a resident.
- H. A student who left California due to a job transfer made at the request of the employer of the student or the employer of the student's spouse, or in the case of a student who resided with and was a dependent of his or her parent, made at the request of the parent's employer; who was absent from

California for less than four years; and who would qualify as a resident if the period of absence was disregarded may be entitled to resident classification.

- I. Other exceptions pertain to certain members of the armed forces and their dependents, apprentices (as defined in Labor Code Section 3074-3077), certain agricultural laborers, and certain employees of California public schools. More detailed information about these categories is available in the Admissions and Records Office. Students seeking additional information concerning residence requirements for tuition purposes should contact the Admissions Office, room L113, or the Associate Dean of Admissions and Records or designee.

California Nonresident Tuition Exemption (AB 540)

Any student, other than a nonimmigrant alien, who meets all of the following requirements, shall be exempt from paying nonresident tuition at the California Community Colleges, the California State University and the University of California (all public colleges and universities in California):

1. The student must have attended a high school (public or private) in California for three or more years.
2. The student must have graduated from a California high school or attained the equivalent prior to the start of the term (for example, passing the GED or California High School Proficiency exam).
3. An alien student who is without lawful immigration status must file an affidavit with the college or university stating that he or she has filed an application to legalize his or her immigration status, or will file an application as soon as he or she is eligible to do so.

Students who are nonimmigrants (for example, those who hold valid F [student] visas, B [visitor] visas, J [exchange visitor visas], etc.) are not eligible for this exemption.

The student must file an exemption request including a signed affidavit with the college that indicates the student has met all applicable conditions described above. Student information obtained in this process is strictly confidential unless disclosure is required under law.

Students eligible for this exemption who are transferring to another California public college or university must submit a new request (and documentation if required) to each college under consideration.

For procedures on requesting the exemption from nonresident tuition at Pasadena City College, please contact the Admissions and Records Office or go online to PCC's website and search for AB540.

(SB 150)

Any special part-time student, other than a nonimmigrant alien, who meets all of the following requirements, shall be exempt from paying nonresident tuition at Pasadena City College.

1. The student must be residing in California.
2. The student must be attending a high school (public or private) in California.
3. The student must be enrolled as a special part-time student in 11.99 or fewer units per semester.
4. The student must be recommended by the principal of the pupil's school and have parental permissions to attend a community college.
5. This exemption does not apply to special full-time students
6. This exemption does not apply to nonimmigrant alien other than "T" and "U" nonimmigrant visa.

A student receiving a nonresident tuition exemption under SB 150 does not receive resident status. The district shall not claim apportionment funding under this Provision.

(SB 141)

1. Any student who is a U.S. citizen and who resides in a foreign country, who meets all of the following requirements, shall be exempt from nonresident tuition:
2. Demonstrates a financial need for the exemption.
3. Has a parent or guardian who has been deported or was permitted to depart voluntarily under the federal immigration and Nationality Act.
4. Moved abroad as a result of the deportation or voluntary departure.
5. Lived in California immediately before moving abroad.
6. Attended a public or private secondary school in California for three or more years.
7. Upon enrollment, the student will be in their first academic year as a matriculated student in California public higher education.
8. Will be living in California and will file an affidavit with the community college stating that he or she intends to establish residency in California as soon as possible.
9. Documentation shall be provided by the student required by statute as specified in the Education Code section 76140(a)(5).

A student receiving a nonresident tuition exemption under SB 141 does not receive resident status. The district is authorized to claim apportionment funding under this Provision.

Military Exemption

- A. A nonresident member of the Armed Forces of the United States stationed in California on active duty (except those assigned for education purposes to state-supported institutions of higher education) and their eligible dependents are exempt from paying nonresident tuition until they are no longer stationed in California or discharged from their military service.
- B. A nonresident member of the Armed Forces of the United States stationed in California on active duty for more than one year immediately prior to being discharged shall be exempt from paying nonresident tuition for up to one year (The one-year exemption shall be used by the student within two years of being discharged) if he or she files an affidavit stating that he or she intends to establish residency in California as soon as possible.
- C. A student or prospective student and their eligible dependents who are using, or are intending to use, "GI Bill education benefits" may be exempt from paying nonresident tuition while enrolled as a student.

Former members of the Armed Forces of the United States who received a dishonorable or bad conduct discharge shall not be eligible for an exemption

International Students – (F-1 Visa Status Students)

The policy of the Board of Trustees of the Pasadena Area Community College District is that provision of an adequate program for international students on campus makes a significant contribution to the education of students at the college and the promotion of international understanding in the community and throughout the world.

Under federal law of the United States, Pasadena City College is authorized to enroll non-immigrant alien students on F-1 student visas for the first two years of an accredited Baccalaureate Degree program. Admission is subject to the requirements stated below and to the approval of the Assistant Director, International Student Office. An international student interested in applying should write to the International Student Office for application materials, or access the college website (www.pasadena.edu/internationalstudents).

All transcripts (submitted in English translation if the original is in another language), English language test results and other required documents must be on file in the International Student Admissions Office by the deadline dates (please see the ISO website for deadline dates).

All F-1 visa students are subject to nonresident tuition as set by the PCC Board of Trustees. Current tuition rates may be obtained from the Office of Admissions and Re-

cords, or the College website (www.pasadena.edu). F-1 visa student must carry illness and accident insurance purchased through Pasadena City College.

A. Admissions Requirements for Admission in F-1 Visa Status

1. General – All Applicants

- a. An applicant must have English language ability adequate to enable the student to profit from instruction at the college level. An international student is not admitted solely for special training in English. Adequacy of English proficiency is determined by a satisfactory score on the Test of English as a Foreign Language (TOEFL), administered worldwide by the Educational Testing Service, Box 899, Princeton, New Jersey 08540; if the test is not available in the applicant's area, results of a standardized test administered at a U.S. consulate may be substituted. PCC also accepts the STEP Test, Level 2, and International English Language Testing System (IELTS) 4.0 minimum score.
- b. An applicant must offer evidence of academic achievement equivalent to an American high school education.
- c. An applicant must present evidence of financial resources to cover costs during the period of attendance at the college. Estimated costs include: nonresident tuition fee of \$4,560 (24 units); enrollment and other fees, \$1,492; health and accident insurance, \$876; living expenses, \$10,000; textbooks and supplies, estimated at \$572, for a total of about \$16,500 per year. Students should anticipate increases each year. Fees are due at registration. The above figures do not include the Summer session.

2. Limitations and Exceptions

- a. An international student attending by another collegiate institution in the United States must obtain a SEVIS Record release from the other collegiate institution before acceptance to Pasadena City College.
- b. An applicant for admission in F-1 visa status who has completed college or university work in excess of that usually offered at a community college level in the United States (first two years of a four-year collegiate program) will be considered overly qualified and not eligible for admission to Pasadena City College. Such students should apply at institutions more appropriate to their needs.

B. Additional Information

1. Orientation

An on-campus international student orientation is provided both in the Fall and Spring semesters.

2. Employment

An international student must attend the College full time; a permit to work on campus is issued only if there is urgent financial need. For off-campus employment, approval of the United States of Citizenship and Immigration Services (USCIS) is required.

3. Housing

International students must arrange for their own housing.

4. Maximum Period of Enrollment

An international student is expected to complete a program in the most expeditious manner possible, generally in four to six semesters.

5. Regulations

An international student should become familiar with the United States Citizenship and Immigration Services regulations as well as College regulations on student conduct and enrollment and comply with those regulations. A student who drops below full-time enrollment or fails to maintain normal progress towards his/her goal is subject to dismissal from the College. The United States Citizenship and Immigration Services will be notified in such cases.

International Students – Other Than F-1 Visa

Some students with visas other than F-1 may be eligible for admission subject to approval of the Director of Admissions and Records. If admitted, such students will be subject to nonresident tuition and may be limited in their enrollment. Individuals holding F-2, B1/B2 visas are not admitted to PCC and are advised that they will be in violation of their visa status by attending school. Questions related to this should be directed to the International Student Office.

COSTS OF ATTENDING THE COLLEGE

The fees and tuition costs are subject to change by State law or at the discretion of the College. The information listed below was correct at the time of Catalog publication.

Fees

State law prescribes payment of the following enrollment fee each semester or session:

Enrollment Fee.....\$46 per unit

All students pay the following fees unless exempted by law:

Enrollment Fee	\$46 per unit
Health Fee	\$20 per semester/ \$17 per intersession
Student Representation Fee	\$1.00 per term
Student Activity Fee	\$10.00 per semester/ \$5.00 per intersession

Nonresident Tuition

Students who are nonresidents of California for tuition purposes (see page 29) are required to pay out-of-state tuition of \$258.00 per unit and \$8.00 per unit in Capital Outlay in addition to the fees above that are paid by all students. However, nonresident students who attended high school in California for three or more years; graduated from a California high school or attained the equivalent (e.g., passed the high school proficiency or GED exam); and are U.S. citizens, immigrant aliens, or never-documented aliens may be eligible for exemption from nonresident tuition. Such students should contact the Admissions Office for more information.

Instructional Materials Fee

Students enrolled in credit or noncredit courses and programs may be required to provide certain instructional and other materials including, but not limited to tools, equipment and clothing.

Refund Policy

A student who has paid fees and withdraws from all or part of his/her enrollment **by the deadline date** may request a refund. Refunds are not automatic. Refund requests must be submitted based on the deadlines published in the semester Schedule of Classes. The college has partnered with BankMobile to deliver refunds to students through an automated process. For more information about BankMobile, visit this link: <https://bankmobiledisbursements.com/refundchoices/>.



PASADENA CITY COLLEGE
CATALOG
2019-2020

Student Support and Learning Services



SECTION II

STUDENT SUPPORT AND LEARNING SERVICES

Counseling -

Room L104, (626) 585-7251 or
www.pasadena.edu/student-services/counseling

Complete educational and career guidance services. Counselors meet with students on an individual or small group basis for a range of purposes: developing a Student Education Plan (SEP), interpreting placement results, determining specific course selection for immediate and future registration, identifying students' concerns and making appropriate referrals for services, and supporting the progress and successful achievement of the students' goal through follow-up services. Although Counselors assist in long-range planning and in checking specific requirements, *the responsibility for meeting graduation requirements, course prerequisites or requirements for transfer to other colleges or universities is one which must be assumed by each student.* The Counseling website contains web-based tools to support your goal setting and planning process. You are encouraged to meet with a Counselor as you progress towards your academic or personal goals. You can see a counselor on a drop-in basis during hours of operation. Students can request to see a specific Counselor. Students can also access a Counselor online. Online Counseling allows PCC students or prospective students with a resource to ask general questions that pertain to reaching their educational goal at Pasadena City College. For more information, go to <http://www.pasadena.edu/student-services/counseling/online.cfm>

Transfer Center -

Room L110, (626) 585-7287

Services provided by the Transfer Center include advisement by representatives from CSU, UC and independent institutions; application, essay and other transfer-related workshops; transcript prescreening for transfer eligibility; information fairs, and tours to universities. Resources include an interactive tool listing transfer requirements specific to universities or majors to facilitate transfer course planning; a library containing university catalogs and transfer resources in multimedia formats.

Career Center & Services -

IT200, (626) 585-3377

The Career Center provides resources and assistance for students exploring an area/ major of study, career goals, employment & internships, and job development skills. New

job listings are posted daily on LANCERjobs (employment database) with multiple information sessions facilitated by employers recruiting on campus. Workshops are offered on topics such as resume writing, interviewing, LinkedIn, major and career exploration with software programs for skill-based assessments. Career Counselors, Advisers and Staff are available to help students with 1:1 appointments, walk-ins are welcomed.

During spring the Career Center will host 6 Industry Career Panels with a Networking session and a Job & Career Fair. Please visit us and allow us to help you with career services. For more information, go to <http://www.pasadena.edu/student-services/careercenter/>

EMPOWERMENT PROGRAMS

The Stan Gray

Academic Athletic Zone -

Room GM112A, (626) 585-3115

The Stan Gray Academic Athletic Zone is a comprehensive success center and counseling program that is designed to meet the specific needs of student athletes at Pasadena City College. The program offers new and transfer student athlete orientations, individual and group tutoring, academic advisement, personal counseling, financial aid assistance, and eligibility/transfer workshops. The primary functions of the program are to provide timely and accurate academic support and improve student success. This program works within the division of student services to support the student athletes of the College. For further information see the website at <http://www.pasadena.edu/athletics/zone/index.cfm>

Puente Project -

Room L104, (626) 585-7860

The Puente Project is a transfer-focused program open to all students. Puente Project coursework focuses on the study of culturally diverse content, with an emphasis on Latinx cultures, histories, and communities. The program includes transfer-level English composition and critical thinking; complemented by both counseling courses, and peer and professional mentoring. Puente students also take part in regular and state-wide conferences and workshops, as well as visit universities and meet university represen-

tatives in preparation for transfer. For further information, visit our website <http://www.pasadena.edu/transfer/specialprograms/puente.cfm>

Ujima Program -

Room CC224, (626) 585-7255

The Pasadena City College (PCC) Ujima Program is a student-centered, learning community dedicated to the success of African-American students in higher education. The Swahili word *Ujima* (pronounced oo-JEE-ma) meaning “collective work and responsibility”, provides historically under-represented students with an environment that nurtures and supports student development and community involvement. Furthermore, the Ujima program fosters academic success through culturally relevant curriculum, culturally prescriptive interventions and social justice pedagogy.

This Program seeks to address and shrink the academic achievement gap for African American college students. The Ujima Program uniquely fuses coursework reflective of the African American experience with the academic rigor required for educational achievement. Students are equipped with success skills, mentoring modules and community building scenarios which helps them to identify with the greater college culture from their first year to their last year at PCC. The Ujima Program Academic Coaching staff is well prepared to work with students from diverse communities. These interactions serve as a valuable resource in the development of student success. Through personal and social engagement strategies, Ujima students (also known as Ujima Queens and Kings) are exposed to campus wide events and activities that enrich leadership skills, builds collaboration among groups and aids in increased retention and persistence rates of our students. Within this learning community students experience the benefits of cohort learning models, dedicated Ujima courses, passionate Ujima teaching faculty and a core group of counselors and support staff (the Ujima Squad) that constantly work together as advocates for student success. Ujima students are prepped to accomplish their educational and career goals in the academic and global communities. Practicing the philosophy of achievement through collective work and responsibility. For additional information please visit the Ujima Program website <http://www.Pasadena.edu/student-services/ujima/> or contact Gena Lopez M.S. at gllopez@pasadena.edu (626) 585-7255.

Veterans Resource Center

Room W108, (626) 585-7475

The Veterans Resource Center (VRC) at Pasadena City College provides a comprehensive program of services for veteran and military-connected students.

The VRC provides the essential components in academic

support services for veterans, military-connected students and for faculty to complement classroom learning and college success. We offer special programs, resources and activities to help the transition to civilian and professional life.

The VRC is located in a newly-renovated space in W108. There is a computer lab, free printing, assistive technology software, women veterans’ programs, new student veteran orientations, individual and group tutoring, mentors, academic and personal counseling and relevant support programs. We are a “Vet Success on Campus” (VSOC) school and have a VA Vocational Rehabilitation counselor on campus two days a week. We also offer wellness workshops and activities. There is also a student veterans club.

The VRC provides a relaxing place for veterans and military-connected students to meet, do homework, get help with their classes, find a mentor, receive the latest veteran benefits information, coordinate with a veteran’s network, attend workshops, and meet with veterans’ service providers.

The VRC is a resource hub, easily accessible and widely available to all veterans and military-connected students.

The VRC’s mission is to provide veterans and military connected students with the resources, support and advocacy needed to be successful in the classroom and ultimately in life.

Extended Opportunity Programs and

Services - Room L107, (626) 585-7439

The Extended Opportunity Programs and Services (EOP&S) is a state-funded program that provides educational and financial support services to students who have experienced economic and educational hardships. The EOP&S program actively encourages the enrollment, retention and completion of low-income students. The EOP&S program services include counseling, advisement, outreach & recruitment, tutoring, book vouchers, school supplies, college tours, and transportation assistance.

EOP&S NextUp - Room L107, (626) 585-7439

NextUp, also known as CAFYES (Cooperating Agencies Foster Youth Educational Support), is a supplemental program of EOP&S. The NextUp program offers eligible current and former foster youth counseling, advisement, assistance with books and supplies, transportation, tutoring, food and emergency housing.

Cooperative Agencies Resources for Education - (CARE) -

Room L107, (626) 585-7439

Cooperative Agencies Resources for Education (CARE) is a supplemental program to EOP&S that was created to recruit and help students who are receiving Temporary Assistance

for Needy Families (TANF) and would like to attend college on a full-time basis to achieve their educational goal of a certificate, degree, or to transfer. The CARE program assists single parents with children under the age of eighteen who would like to attend college on a full-time basis. The CARE program services include academic counseling, career assessment, self-development workshops, and financial assistance.

Program for Academic Support Services (P.A.S.S.) - Room D112, (626) 585-7815

The Program for Academic Support Services (PASS) is funded by the U.S. Department of Education to increase the retention, graduation and transfer rates of low-income, first generation and students with disabilities. Services provided by PASS include tutoring, academic counseling, financial aid and scholarship assistance, financial literacy seminars, transfer support, and personal and career counseling. PASS provides a holistic approach to student development and student success. Participants will gain knowledge and skills to empower them to achieve their educational goals and ultimately obtain a Bachelor's degree.

CalWORKs Program -

Room L107, (626) 585-7060

The PCC CalWORKs (California Work Opportunity and Responsibility to Kids) Program is designed to provide holistic support and services to students with children under 18 that are receiving county cash aid (welfare) while enrolled at the college. CalWORKs students are working toward the completion of county-approved education/training programs and have the opportunity to participate in CalWORKs specific work-study employment that will not reduce their cash aid. The program assists students with individual counseling, personal and job development, processing county paperwork, and some financial assistance with books, educational supplies, transportation and child-care fees. With funding from the California Community College Chancellor's Office and in partnership with the Los Angeles County Department of Public Social Services, the CalWORKs Program strives to guide and partner with students on their journey to success. Access our website by going to www.pasadena.edu/student_services/calworks.

FINANCIAL AID

L-114, (626) 585-7401

Email- finaid@pasadena.edu

On the web- <https://pasadena.edu/admissions-and-aid/financial-aid/index.php>

PCC's Title IV Code- 001261

Financial aid is available for students to assist with the costs associated with attending college. Although the primary responsibility for meeting college costs rests with the student and his or her family, it is recognized that many families have limited resources and are unable to meet the cost of a college education. Most financial aid programs were established to provide assistance for students with documented financial need.

The Office of Financial Aid provides financial assistance in the form of grants, enrollment fee waivers, loans, scholarships, and part-time employment for students who meet financial aid program eligibility requirements. Student financial aid awards are contingent upon continued funding from Federal and State government agencies. Students eligible for financial aid typically receive a "package" of aid from one or more financial aid programs offered.

Applications

Students who are a permanent resident or citizen of the United States are eligible to apply through the FAFSA; they can do so online at FAFSA.org. To be considered for financial aid, students must complete the FAFSA each academic year. This application is available beginning in October for the following academic year. If a student is interested in a State of California Grant, the FAFSA and Cal Grant GPA verification form must be completed by the March 2nd deadline of each year. For students who miss this deadline, there is a second opportunity for community college students to apply for Cal Grants. The second deadline is September 2nd. Additional information and eligibility requirements are available at the California Student Aid Commission.

The FAFSA is the application for the following Federal and State programs:

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal Work-Study Program (FSW)
- Federal William D. Ford Direct Loan Program
- California College Promise Grant (formerly BOG fee waiver)
- State Cal Grants B and C
- Need-based scholarships
- Chafee Grant (for Foster youth)

The information reported on the FAFSA may be verified by the Financial Aid Office using parent and/or student federal income tax information. Other documents may also be requested such as a copy of the Alien Registration card (if applicable) or other types of documents needed to verify or resolve conflicting data.

Recipients of aid from Federal and State funded programs

must be students enrolled in eligible programs of study for the purpose of obtaining a degree, an approved Title IV certificate, or transfer. In addition to financial need, other eligibility requirements for most Federal and State programs include:

1. Having a high school diploma or equivalent such as a GED.
2. Being a U.S. citizen or eligible non-citizen.
3. Maintaining satisfactory progress in accordance with the standards.
4. Not be in default on a federal loan or owe a grant overpayment.
5. Be registered with the selective service, if required.

Eligibility to apply through the California Dream Act Application (AB 540)

For students who meet the AB 540 nonresident tuition exemption, they are eligible to apply for state financial aid, and can do so online at California Dream Act application website. To be considered for financial aid, students must complete the California Dream Act application (CA Dream Act) each academic year. This application is available beginning in October for the following academic year. If a student is interested in a State of California Grant, the CA Dream Act and Cal Grant GPA verification form must be completed by March 2nd each year. For students who miss this deadline, there is a second opportunity for community college students to apply for Cal Grants. The second deadline is September 2nd. Additional information and eligibility requirements are available at California Aid Commission.

The CA Dream Act is the application for the following State programs:

- California College Promise Grant (formerly BOG fee waiver)
- State Cal Grants
- Need-based scholarships

The information reported on the CA Dream Act may be verified by the Financial Aid Office using parent and/or student federal income tax information. Other documents may also be requested to verify or resolve conflicting data.

Recipients of aid from State-funded programs must be students enrolled in eligible programs of study for the purpose of obtaining a degree, certificate, or transfer. In addition to financial need, other eligibility requirements for State programs include:

1. Having a high school diploma or equivalent such as a GED.
2. Being an AB 540 resident.

3. Maintaining satisfactory progress in accordance with the standards.
4. Not owe a grant overpayment.
5. Be registered with the selective service, if required.

Required Attendance

Students who receive federal financial aid and do not attend any classes will be required to repay all of the funds they have received. Students who withdraw from all classes prior to completing more than 60% of the semester are subject to return of Title IV funds requirements, will have financial aid eligibility recalculated based on the percentage of the semester completed, and will be required to repay any unearned financial aid received. At Pasadena City College a student's withdrawal date is determined as follows:

1. the date the student officially notified the Admissions and Records Office of his or her intent to withdraw, or
2. the midpoint of the semester for a student who leaves without notifying the college, or
3. the student's last date of attendance at a documented academically-related activity, or
4. the date posted by the instructor indicating last day of attendance.

California College Promise Grant (formerly BOG fee waiver)

The California College Promise Grant (formerly BOG fee waiver) program is available to qualified California residents. This grant functions as a fee waiver where the enrollment fee is waived, and the student is responsible for paying the additional fees assessed. There are three methods to qualify. (1) Temporary Assistance for Needy Families (TANF), Supplemental Security Income (SSI), or General Relief recipient, or (2) Household size/family income, or (3) Financial need as determined by filing the Free Application for Federal Student Aid (FAFSA)/ or the CA Dream Act Application. In addition to the three methods, there are special classifications that qualify for this grant subject to certification and/or documentation. Refer to the California College Promise Grant application for a list of these classifications.

Required Academic Progress for California College Promise Grant (formerly BOG fee waiver)

- **Academic — Sustain a GPA of 2.0 or higher**
If your cumulative GPA falls below 2.0 for two consecutive primary terms (fall/spring semesters, or fall/winter/spring quarters), you may lose your fee waiver eligibility.

- **Progress — Complete more than 50% of your coursework**

If the cumulative number of units you complete is not more than 50% in two consecutive primary terms (fall/spring semesters, or fall/winter/spring quarters), you may lose your fee waiver eligibility.

- **Combination of Academic and Progress Standards**

Any combination of two consecutive terms of cumulative GPA below 2.0, and/or cumulative unit completion of not more than 50% may result in loss of fee waiver eligibility.

For further information regarding notification and appeal, please go to resources on the Pasadena City College Financial Aid web page. In addition, the college administers a variety of scholarship programs. Information about the College Scholarship Program can be obtained online on the Scholarships webpage.

For additional information about financial aid and the programs and services we offer, visit us on the web at <https://pasadena.edu/admissions-and-aid/financial-aid/index.php>

Disabled Student Programs and Services

(DSPS) - Room D209, (626) 585-7127

Disabled Student Programs and Services is designed to enable students with verified disabilities to have access to all of the College's programs and activities for which they qualify.

Educational support services may include: test accommodations, interpreting services, real-time captioning, access to printed material in alternate formats, assistive technology, learning disabilities assessment, specialized counseling, registration assistance and consultation with faculty and staff. For more information, please visit the DSP&S website www.pasadena.edu/student-services/dsp.

Student Health Services -

Room D105, (626) 585-7244

(Hours vary depending on intersession/semester)

Student Health Services includes first aid and emergency services, treatment of short-term illnesses, sexual health counseling and treatment, and education in health promotion and health protection. Students who have significant health conditions are strongly encouraged to inform the Student Health Services staff of their health needs.

Confidential health services are provided by a professional staff of health counselors, registered nurses, registered dietitians, nurse practitioners and physicians.

An overview of low cost and no cost services:

- First aid and emergency care
- Tuberculosis screening and testing
- Immunizations, prescription and over-the-counter medications
- Laboratory services
- Nutritional counseling
- Smoking cessation services
- Sexual health screening and treatment
- Women's health care (PAP smears, birth control)
- Health clearance for health sciences programs
- Health promotion and disease prevention activities and education
- Substance abuse prevention information
- Referral to community health resources and agencies

For more information, please visit: www.pasadena.edu/healthservices.

Personal Counseling -

Room D203, (626) 585-7273

Personal Counseling is provided by the counseling psychology staff to give more specialized help than can be made available through regular counseling channels. Services include individual counseling, crisis intervention, information, and, when appropriate, referrals to community agencies.

The services emphasize short-term consultations on specific problems affecting success in college. Students may schedule a confidential appointment with a counseling psychology staff member by coming to L108, Psychological Services. For more information, please visit www.pasadena.edu/student-services/psychservices.

Child Development Center

The Child Development Center, located at 1324 East Green Street, Pasadena, CA 91106, operates under the supervision of the Division of Social Sciences. It provides student parents who are enrolled at Pasadena City College and at the Community Education Center the opportunity to pursue their educational goals while their children are receiving quality child care in an enriched educational program. PCC faculty, staff, and community members are also eligible to use the Center. The Center serves as a laboratory facility for students in the Child Development Program at the College.

For more information about fees and enrollment, contact the Center at (626) 585-3180 or visit www.pasadena.edu/cdc.

GI Bill^{®1} Benefits Processing -

Room W108, (626) 585-7475

Pasadena City College is approved as an institution for higher learning for veterans and veterans' dependents entitled to educational assistance.

Veterans enrolling at Pasadena City College and intending to use VA educational benefits for the first time are required to submit the following documents to the veterans clerk before they will be certified for benefits:

1. Member 4 copy of Certificate of Release or Discharge from Active Duty (DD214).
2. Official transcripts from all colleges attended.
3. Veteran's Statement of Responsibility (obtained from the veterans clerk).
4. Certificate of Eligibility for GI Bill[®] benefits, or verification of application for benefits.
5. Other documents requested by the veterans clerk necessary to complete the application for benefits.

There are several education programs available for veterans, reservists and dependents. The benefits for each program are different.

Post 9/11 (CH 33) students receive a Monthly Housing allowance (MHA) if attending at more than 50% of full-time in approved courses. Students also receive an allowance for books and supplies up to \$1,000 per year depending upon units taken. Some fees will be paid by the VA directly to the College for courses that are requirements for the student's educational program. The covered fees are the Enrollment fee, Course fees and the Health fee. All other tuition and fees are the responsibility of the student.

Chapter 33 recipients training at 50% of full-time or less will receive payments for books and supplies. The VA will also pay some fees. These fees will be paid by the VA directly to the College for courses that are requirements for the student's educational program. The covered fees are the Enrollment fee, Course fees and the Health fee. All other tuition and fees are the responsibility of the student. No Monthly Housing Allowance is paid to CH 33 participants for training at 50% of full-time or less.

For students receiving Montgomery GI Bill[®]-Active Duty (CH 30), Montgomery GI Bill[®]-Selective Reserve (CH 1606), Reserve Educational Assistance Program (CH 1607), and Survivors' and Dependents' Educational Assistance Program (CH 35) benefits, a monthly assistance allowance is available for full-time, three-quarter-time or half-time students. Chapters 30, 1606, and 1607 recipients training at less than half-time will receive a onetime payment for the amount they have paid in tuition and fees. No monthly

assistance is paid to Chapter 30, 1606 or 1607 participants for less than half-time enrollment. Chapter 35 recipients enrolled for less than half-time will receive the total they have paid in tuition and fees. The total will be divided by the number of months enrolled and the resulting amount will be sent monthly.

Students using Vocational Rehabilitation and Employment (CH 31) benefits are paid either a Monthly Housing Allowance or a monthly subsistence allowance depending on eligibility. Contact your VA Vocational Rehabilitation Counselor (VRC) for more information. The Monthly Housing Allowance is available for students attending at a more than half-time rate. The monthly subsistence is available for students attending at a half-time or more rate. The VA pays the school directly for all tuition, fees, books, parking and the allowed amount for supplies.

The Veterans Access, Choice, and Accountability Act of 2014 was signed into law in August 2014. As a result of this Act, certain veterans and their dependents are now eligible to have their out-of-state tuition, and fees associated with that tuition, waived for terms beginning after July 1, 2015. This waiver applies to the following groups:

1. Veterans who:
 - Were discharged within 3 years of the beginning of the term.
 - Had a length of active duty service that was 90 days or more.
 - Live in California (regardless of legal state of residence).
 - Are eligible to use benefits under the Post-9/11 GI Bill[®] (CH 33) or the Montgomery GI Bill[®]-Active Duty (CH 30).
2. Dependents (spouse or child of a veteran) who have had GI Bill[®] benefits transferred to them from the veteran and the following conditions are met:
 - The veteran who transferred the benefit was discharged within 3 years of the beginning of the term.
 - The veteran had a length of active duty service that was 90 days or more.
 - The dependent lives in California (regardless of legal state of residence).
 - The dependent is eligible to use Post 9/11 benefits through Transfer of Entitlement.
3. Dependents (spouse or child of a veteran) eligible for the Marine Gunnery Sergeant John David Fry Scholarship benefits and the following conditions are met:

¹ GI Bill[®] is a registered trademark of the U.S. Department of Veterans Affairs (VA)

- The date of death of the service member on whom the spouse/child was dependent is within 3 years of the beginning of the term.
- The service member served at least 90 days on active duty.
- The dependent lives in California (regardless of legal state of residence).
- The dependent is eligible to use the Marine Gunnery Sargent John David Fry Scholarship benefit.

Students who believe they are eligible for this waiver should contact the GI Bill® processing desk at (626) 585-7475.

Veterans must submit their Member 4 copy of their DD214 and their Certificate of Eligibility for the Post 9/11 or MGIB-AD. Dependents must submit the Member 4 copy of the DD214 of the veteran upon whom they are dependent and the dependent's Certificate of Eligibility for the Post 9/11 GI Bill® transfer of entitlement.

Tuition Assistance and Refunds

The return of unearned military TA funds will follow the same guidelines as the Department of Education Title IV funding, outlined in PCC's refund policy <https://pasadena.edu/admissions-and-aid/financial-aid/return-to-titleiv.php>.

Reserve Officers Training Corps

Pasadena City College students wishing to participate in a Reserve Officers Training Corps program may enroll concurrently in such a program in a neighboring institution.

STUDENT ACTIVITIES AND ORGANIZATIONS

Office of Student Life

Room CC105

Located in the Campus Center, the Office of Student Life (OSL) supports the college's mission by facilitating and encouraging student learning and success beyond the classroom. The OSL provides the resources necessary to develop, enhance, and support student engagement at Pasadena City College. The Office of Student Life is committed to facilitating the development of the whole student through the core tenets of inclusion, engagement, service, social justice, holistic learning, and support.

The Office of Student Life offers activities, programs, and services to assist students in achieving a balanced educational experience. The opportunities include partici-

pation in student governance; involvement in clubs and student organizations; leadership development activities; cultural awareness and social justice programs; educational events; recreational activities and programs; student conduct and Title IX resolution; and other student support services that reinforce student success.

The department endeavors to connect students to human, financial, and other resources, needed to support student development that is focused on active and responsible student self-direction, student self-governance, and engagement. The Office of Student Life intends to provide full-fledged programs and services appropriate to a highly diverse, urban college campus of 30,000 students.

Intercollegiate Athletics

The College offers intercollegiate competition in the following sports:

	Men	Women
Baseball	X	
Badminton		X
Basketball	X	X
Cross Country	X	X
Football	X	
Soccer	X	X
Softball		X
Swimming	X	X
Track & Field	X	X
Volleyball		X
Water Polo		X

Athletic teams at Pasadena City College are members of the South Coast Conference. Football stands alone as part of the Southern California Football Association, American Division Pacific Conference. Both are affiliated with the California Community College Athletic Association.

Student Government

Student government at Pasadena City College is an integral part of the educational program. It gives students the opportunity to develop leadership skills, enhance cultural awareness, work with others in formal and social situations, enhance interpersonal communications skills, pursue special interests, develop critical thinking skills, and support involvement opportunities for all PCC students.

Student government is not intended to take the place of other educational endeavors. Instead, its purpose is to enrich the student's total educational experience. It is intended to complement coursework and other activities. Students are urged to improve study habits and to manage their time well.

The structure of the government is based on its major functions: activities production, representation, legislation, and administration and finance. Student government

¹ GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA)

includes the ASPCC Executive Board, the Supreme Council, Commissioners, and various committees. As well, the student member of the Board of Trustees plays an active role in student government.

Clubs and Organizations

Pasadena City College offers a broad spectrum of involvement opportunities through approximately 65 student clubs and organizations. There are recreational, vocational, political, cultural, religious, educational and service clubs, as well as other interest groups. Students enrolled at PCC are encouraged to consider membership in the clubs and organizations of their choice. Students may form additional organizations to meet special needs or interests. All student organizations must have a faculty advisor and be chartered by the Inter-Club Council, as outlined in Associated Students policies. Information and required forms are available in the Office of Student Life located in the Campus Center, CC105.

Commencement

Held in the College's Robinson Stadium, commencement exercises take place during the last week of the Spring semester. The formal ceremony, followed by a hosted reception, is a special tradition at Pasadena City College. An official diploma cover is presented to each graduate participating in the ceremony. The diploma, certifying that requirements for the Associate in Arts or the Associate in Science Degree have been met, is mailed to the graduate as soon as possible after the close of the semester.

Commencement is an impressive tradition. Members of the graduating classes from the Fall, Winter, Spring and Summer terms are encouraged to participate in the annual event.

Campus Publications

The *Campus Crier* is published regularly during the Fall and Spring semesters, for all students and personnel. The Crier provides timely information on official deadlines, financial aid and scholarship announcements, special events, club meetings, and more.

The *Guide to Leadership and Involvement* is designed to guide student leaders, prospective student leaders, and student clubs and organizations in producing successful activities and programs. As a companion to the Advisors Handbook, it covers areas to be considered when planning an event – financial aspects, scheduling, publicity set-up, preparation, evaluation and follow-up – and it includes useful sections with necessary forms, contact telephone numbers, and more.

The College news publication, the *Courier*, is published daily online on pcccourier.com by students in the Visual Arts and Media Studies. Students who wish to work on the Courier must enroll in the Journalism 007A/007B/107A/107B classes.

Inscope, an anthology of student literary work, publishes meritorious stories, essays and poems each year. Under the direction of the English Division, it is edited by a board of student editors and draws its written and art materials from the entire student body.

Spotlight is a slick feature magazine published each year by students in the magazine and small publications class. Students must sign up for Jour 005 to work as writers or editors on *Spotlight*.

Performing Arts - Room CA119, (626) 585-7216

Forensics

Forensics, or competitive intercollegiate speech and debate, provides students at Pasadena City College with an opportunity to compete with major colleges and universities at local, state and national tournaments. Students will develop speaking, research and critical thinking skills as they participate in individual events, debate and Reader's Theater. The program is open to all students with or without prior experience in speech or Forensics.

Music

The Pasadena City College Music Department offers a wide variety of instrumental and vocal performance ensembles including wind and marching bands, the Tournament of Roses Honor Band, symphony orchestra, large and small choral groups, opera and musical theater productions, large and small jazz ensembles, ethnic music ensembles, jazz combos and chamber ensembles for strings, woodwinds, brass, percussion, piano, guitar. Under the imaginative leadership of prominent directors, these ensembles have created a reputation for musical excellence.

The Music Dept. offers a complete catalog of music courses from beginning instrumental techniques and appreciation courses to the in-depth music theory, history and performance courses that support the Associate in Arts Degree in Music for music majors. With additional courses in composition, music technology, recording, music business, education, and performance skills, PCC's Music Dept. provides a comprehensive set of courses for students at all levels of experience.

Theater Arts

The Pasadena City College Theatre Arts Department focuses on training the next generation of theatre artists

through a multi-discipline approach and collaborative performance. Students work on all facets of six major stage productions, four workshop productions, an annual spring musical, and musical theatre and student directing workshops. From design to directing, budgeting to marketing, and acting to writing, theatre students have access to hands-on education in all parts of theatre craft.

Dance

The Dance Department offers a wide variety of classes, including dance techniques classes in the areas of ballet, modern, jazz and tap; social dance, salsa and Latin social dance; dance history; and dance production and choreography. Students in the production classes present a formal dance concert each semester.

LEARNING RESOURCES

Learning Assistance Center -

Room D300, (626) 585-7230

The Learning Assistance Center (LAC) provides academic support services for Pasadena City College students and faculty to complement classroom learning and college success. Located on the 3rd floor of the D building (D300), the LAC operates Monday through Thursday 7am-9:45pm, Friday 7am-3:45pm, and Saturday 9am-2:45pm. Students are required to present a valid PCC Lancer Card to utilize center services.

Tutoring for a wide variety of subjects is provided, free of charge, on a walk-in basis. Certified peer tutors assist students with learning skills and course-related assignments. Subjects tutored include math and statistics, accounting, English, ESL, and foreign languages. Tutoring for courses in the Natural, Social, and Computer Sciences is available as well. Students enrolled in Career and Technical Education programs and courses receive tutoring in the LAC and in labs and classrooms across the campus. Visit the LAC website (www.pasadena.edu/student-services/lac) for updated schedules and other useful information including online 24/7 tutoring options.

Center resources include 10 computers with applications, Internet access, and basic skills software (English, Math, and English as a Second Language). Laptop computers are also available for checkout with a valid student ID. A number of assistive devices are available to students with disabilities. A wide variety of multimedia materials for ESL, foreign languages, and study skills are available for on-site use. Students and faculty can access handouts for English skills and learning strategies at the entrance to the center. Professional full-time staff and a trained team of student workers are on hand to assist students with direction to appropriate learning strategies and resources.

Library - LL, (626) 585-7221

PCC Library is here to support your academic success! As the campus gateway to a world of information, the library offers a wealth of current, credible resources in both print and electronic formats. Explore our diverse array of subscription databases, which can be accessed from any Internet-connected device with a current LancerPoint username and password, and our ever-expanding collection of books.

One-on-one reference and research assistance is available at the Library Reference Desk as well as by phone, email, and 24/7 chat. Librarians teach customized research sessions for classes in all divisions, citation workshops, a credit class on college research (LIB 001), and certificate programs in Library Technology and Digitization Skills. PCC Library also provides quiet study space, laptop lending, group study rooms, cell phone charging lockers, computer labs, textbooks, printing, and photocopying.

Library Borrowing Privileges

Library borrowing privileges are granted to all current PCC students, faculty and staff with a PCC Lancer ID. In addition, borrowing privileges are extended to adult residents of the Pasadena Area Community College District and to people who work in the District. Register at the Circulation Desk with a driver's license and one other item showing the same address as your driver's license, such as a recent utility bill or bank statement. Students who attend high school within the District's boundaries may register for borrowing privileges at the Circulation Desk with a current high school ID card.

Library telephone numbers:

Reference Desk	(626) 585-7360
Circulation desk	(626) 585-7174
Computer Labs	(626) 585-3363
General Information	(626) 585-7221

Tutorial Services

Tutoring is provided for students in a variety of locations on campus, as well as online, 24/7. The Learning Assistance Center (LAC) offers tutoring to all students declared as Career and Technical Education (CTE) majors or working on certificate programs. The LAC also offers tutoring for transfer and basic skills courses in subjects such as accounting, business, mathematics, economics, statistics, English, ESL, and foreign languages, as well as computer sciences. Tutoring support is available to eligible students through the Teaching and Learning Center (TLC), and TRIO programs. Several academic areas provide tutoring assistance and supplemental instruction, such as the Writing Center, Math Resource Center, Social Sciences Learning Center, the Academic Athletic Zone, and the Natural Sci-

ence study centers. Tutoring is performed by qualified student peers and designated staff. These services are designed to meet the needs of the individual student and to develop learning communities.

Computer Learning Center -

Room D101-104 and W101, (626) 585-7357

During day, evening, and weekend hours, the Computer Learning Center (CLC) labs in D101 and D104, provide PCC students with access to the campus network which includes a wide variety of applications and instructional software. The online course management system, Canvas, is available through the network, as are student services resources for financial aid, counseling, registration, etc. In addition, students can utilize the Web to carry out college-related assignments requiring Internet access. Faculty can reserve time in computer classrooms D101 and W101 for group instruction or orientation. Students may receive guidance in exploring their personal learning styles, time management and study strategies offered through workshops and personal appointments. Walk-in tutoring for specific Computer Science courses is also available at scheduled times.

Staging Services -

Room C230, (626) 585-7260, (626) 585-7045

Staging Services supports the instructional programs of the College by providing audio visual technical assistance. Staging Services is responsible for the operation of Sexson Auditorium, the Forum, Westerbeck Recital Hall and all of the other lecture halls, as well as special events at the main campus and at the Foothill Campus. In addition to meeting the needs of the instructional program, Staging Services supports the cultural activities of the surrounding community by providing facilities and assistance to off-campus organizations.

Video Production Services

Video Production Services is responsible for all College video productions. Services range from the documentation of campus events to the production of department and college promotional productions.

Video Production Services also assists in the editing of educational video productions by either overseeing or training faculty.

For more information, please call Strategic Communications and Marketing at (626) 585-7250.

SUPPORT SERVICES

Food Services

A wide selection of dining options are available campus-wide.

The ground floor of the Campus Center houses The Piazza Dining Room for students, faculty and staff. The Piazza serves made-to-order breakfasts, including a custom breakfast burrito bar. The Piazza offers an Italian Pasta Line and fresh pizza, Sweet and Savory Crepes, Fast and Casual Asian Entrée line, a full service panini and deli sandwich counter, and The Daily Grill for burgers and more. A full line of popular beverages and bakery items are also in the Piazza. The Lancer's Pass is located in the center of campus, adjacent to the Aquatic Center, for hot entrees, beverages, snacks and sandwiches. The Java Hut, located near The Shatford Library, offers Starbucks coffees, sandwiches, selected cold beverages, and snacks. Dining facilities in the Physical Education complex for Robinson Stadium and the Hutto-Patterson Gymnasium provide concession services during selected events.

Full-service catering, from casual menu service to fine dining, is available for College functions and on-campus events.

Bookstore -

Room B101, (626) 585-7378

Your Pasadena City College Bookstore is the place for books (new and used), supplies, gifts, school spirit items, Lancerwear clothing, snacks, and more. Books and our other merchandise are available through our website: <http://bookstore.pasadena.edu/> with ship-to-home and in-store pick-up options available. We now have many textbooks available to rent and also in digital format.

Transportation and Parking -

Room B210, (626) 585-7223

The College is located near downtown Pasadena and is easily accessible by car, bus or the Gold Line train. On-campus parking is limited and is available by displaying a semester or daily permit. Handicapped parking is available for people displaying a handicapped placard or handicapped license plates. Shuttle service is available every thirty minutes for transportation between PCC (Lots 6, 7), Allen Station Gold Line, and the Community Education Center.

Bicycle parking racks are available throughout the campus for students and staff to secure their bicycles. Bicycles shall not be secured to any other objects on campus such as poles, fences, and trees.

Pasadena City College Police Department -

Room B210, (626) 585-7484

The Pasadena City College Police Department is staffed with sworn Police Officers, the hours of operation is 24 hours a day and 7 days a week, including holidays. The Department is located in the B Building (room B210). The Department is responsible for providing police services, enhancing safety, and enforcing traffic and parking laws. Students who have a concern for their safety while on campus are encouraged to contact the Department for assistance. Emergency telephones are located in all elevators, parking lots, and most buildings. Please do not hesitate to use these telephones if you have a concern for your safety. The Department offers an escort service for students and staff from classrooms to vehicles. Students and staff are encouraged to use this available service. The District's crime awareness and crime statistics, otherwise known as the "Clery Report," are available in the B Building, room B210 and can also be located on the campus website under "Clery Report."

Parking Permits – Room B210, (626) 585-7441

Semester parking permits for staff and students are available for purchase online (www.pasadena.edu/getparking/). A temporary parking pass will be issued at the time of the purchase and the actual permit will arrive via mail within 5 business days. A limited number of parking permits will be available for over-the-counter sales. Parking permits can be purchased at the front counter of Campus Police, B Building, Room 210 two to three weeks prior to the beginning of each semester/intersession. Staff parking permits will be available at the front counter of Campus Police. Exact cash or checks are accepted. Students and visitor may also purchase daily parking permits for \$2.00 a day from the parking permit machines located in every level of the parking lots. More information and the fee schedule are available online at www.pasadena.edu/studentservices (click on Parking).

Lost and Found –

Room B210, (626) 585-7484 ext. 5265

Items found on campus may be turned in 24 hours a day to the Lost and Found in the Police Department in Room B210. Office hours for inquiring about retrieving lost property are Monday through Thursday 10:00 a.m. to 2:00 p.m. The Lost and Found Department actively tries to reunite lost items with their owners by using contact information provided in the Student Registration System. It is your responsibility to keep your contact information current and, if possible, on your property. Please put your name, phone, and/or email address on all of your property so it may be returned to you in a timely manner.

Smoking on Campus

The Pasadena Area Community College District Board of Trustees adopted Policy No. 5575 which prohibits smoking inside any District owned, or District occupied building or vehicle. The policy also prohibits outdoor smoking on District owned property.

Housing

The College maintains no dormitories and assumes no responsibility for off-campus student housing. Housing information is available in the Office of Student Life, located in the Campus Center, CC105.

ACADEMIC INFORMATION

Attendance

Students at Pasadena City College are expected to attend every class meeting. It is especially important to attend the first two class meetings or make prior arrangements with the instructor because nonattendance may result in being dropped from the class. It is equally important to maintain attendance throughout the semester or intersession because instructors may drop students who have missed 1/9th (11%) of the total number of class meetings for excessive absences. Three "tardies" (late arrivals) may be considered the equivalent of one absence. See "Academic or Administrative Drop" section.

Course Examinations

Final semester examinations are required in each course. All students must take these examinations at the scheduled time and place.

Examinations, other than the final examination, are given during class with the requirement that a midsemester grade can be determined and reported to the student.

Distance Education

Distance Education courses offer students flexibility and access to PCC courses, which can be taken either fully online or partially online (hybrid). Course content and required participation remain the same as regular on-campus classes, however for distance education courses all or part of the instruction takes place within the College's learning management system, Canvas, which is accessed via the Internet. Students can use their own computer or a campus lab computer to access and participate in the courses. Available online and hybrid courses can be found in the Schedule of Classes. For more information about distance education go to <https://pasadena.edu/academics/pcc-online/index.php>.

Independent Study

Under the independent study program, the student may pursue topics or problems of special interest beyond the scope of a regular course under the supervision of a faculty advisor. The work is of a research or creative nature, and normally culminates in a research paper, production or comprehensive examination. Regular progress meetings and reports are required throughout the semester. Completion of the project is required before credit is earned. Before registering for independent study, the supervising instructor and division dean must approve the student's plan or project.

Textbooks

Students are required to buy books needed for courses and may do so at the College Bookstore. Supplies for specialized curricula such as drafting, cosmetology, nursing, photography and sign arts will require additional expenditures.

Although costs for textbooks vary depending on the classes in which students enroll, some classes utilize Open Educational Resources (OER). OER are textbooks and course materials that can be accessed online for free. Classes at PCC are increasingly using OER to reduce the overall cost of college. Starting Spring 2018, course sections that are using OER can be found through the online Schedule of Classes. For more information about OER at PCC, see: libguides.pasadena.edu/oer.

PCC Honors Transfer Program

The PCC Honors program is designed to engage and challenge motivated students to prepare them for successful transfer from community college to university. The program offers special sections of a wide variety of UC transferable courses that fulfill general education requirements for transfer. These Honors classes are open only to students participating in the program and offer a variety of special opportunities, including student research projects, special field trips, service learning, and other enhanced learning enrichment. Completing the Honors Transfer Program strengthens transfer applications and gives students priority consideration for transfer to many universities.

To be part of Honors program, a student must be eligible for English 001A and have a GPA of 3.2 or above either from high school (unweighted) or college with 12 units or more of UC transferable courses completed. Honors students must maintain a 3.2 or above GPA in UC-transferable courses while at PCC and enroll in at least one Honors course per semester until the program is completed. Completion of the program requires a total of 15 units of Honors coursework with a grade of "B" or better in all courses. Completing the Honors program is noted on the college transcript and strengthens a student's transfer

application to any university and gives students priority consideration for transfer to participating universities (UCLA, UC Irvine, UC Riverside, Pomona, Occidental, Mills College, others). For more information contact the Honors program at honors@pasadena.edu or visit the program website: <http://www.pasadena.edu/honors>.

Honors

Dean's Honors is posted to the student's transcript each semester. It includes all students whose semester grade-point average is 3.500 or higher, with A, B, or C grades in 12 or more units of courses other than those in the 400 series.

Administration Honors are awarded to graduates who have completed at least 36 units at Pasadena City College and who have achieved a grade-point average of 3.670 or above in work at Pasadena City College and in all work attempted. Courses taken on a pass/no pass (P/NP) basis are not included in the required 36 units at Pasadena City College. Non-degree applicable courses numbered 400 and above are also excluded from the required 36 units.

Valedictorian Award recognition is given to the graduate(s) with the highest grade-point average among the recipients of Administration Honors.

Alpha Gamma Sigma is a California state honor organization the purpose of which is to encourage and recognize scholarship on the community college level. Pasadena City College has the Alpha Chapter. Counseling Services is responsible for providing students with the membership requirements.

Dean's Honors, Administration Honors and Alpha Gamma Sigma are recorded on the student's transcript.

Study Abroad Programs -

Room C245, (626) 585-3365

The College offers both short-term and semester-long Study Abroad Programs in a variety of study locations. Information about these programs is available on the College website, the Schedule of Classes and from the Study Abroad Office.

Fall Semester Study Abroad: Florence, Italy. PCC offers a semester of study in the Renaissance city of Florence, Italy. Students select a program of 11-20 units of transferable credit. Field-study excursions include such places as Rome and Siena. Students live in shared apartments. The program is accepted by the PCC Honors Program. For more information, call (626) 585-3365 or visit www.pasadena.edu/study-abroad.

Spring Semester Study Abroad: Oxford, England. PCC offers a semester of study in the rich cultural environment of Oxford, a center of learning since the 13th century. The program offers 15 to 18 transferable units and includes field-study excursions to such places as London, Bath, and Stonehenge. Students live in British home stays. The program is accepted by the PCC Honors Program. For more information, call (626) 585-3365 or visit www.pasadena.edu/study-abroad.

Winter and Summer Study Abroad Programs. PCC offers 2-6 week summer study abroad programs in various locations. Previous programs have traveled to Spain, Ireland, Viet Nam, China, Costa Rica, Austria, Mexico, and South Africa. For information about future programs and study locations, call (626) 585-3365 or visit www.pasadena.edu/study-abroad.

SPECIAL INTEREST PROGRAMS

From Page to Performance

Offered through the English Division and conducted in the Renaissance setting of the Oregon Shakespeare Festival in Ashland, Oregon, this one-week summer program includes theater tickets for plays, backstage tours, and daily class sessions with professional actors and directors from the 150-member company. Students can earn one unit of transfer credit or take the course on a credit/no credit basis.

Theater in London

Offered through the English Division, this one-week program takes place in London, England, during spring break. Students attend plays, have escorted tours in London, including backstage tours, and spend one day visiting a site in the English countryside. Students can earn one unit of transfer credit.

Theater in New York

Offered through the English Division, this one-week program takes place in the heart of Broadway during spring break. Students attend plays, meet with faculty for post-theater discussions, and tour Manhattan and its various neighborhoods. Students can earn one unit of transfer credit.

MESA Program - Room IT224, (626) 585-3085

The Mathematics, Engineering, Science Achievement (MESA) program is designed to assist educationally disadvantaged students transfer to obtain degrees in science technology, engineering, and math (STEM) from four-year

institutions. MESA is an academic-centered program with a holistic approach that uses various components to support educationally and financially disadvantaged students majoring in (STEM). The MESA Program components includes academic workshops, tutoring, field trips, mentoring, cultural exchange, and professional development. MESA brings internship and scholarship opportunities to its program members and supports community building as a way to bridge STEM student success. The MESA Center is located in IT224. MESA requires prospective members to apply, meet eligibility, and meet program contract requirements to remain in good standing every academic school year. Eligibility includes (but is not limited to): calculus-based STEM transfer majors, financial aid eligible, academically disadvantaged (as defined by the CCCC). MESA is open to undocumented students who are either AB540 or CA Dream Act approved. Applications are available during the summer months and when announced through our listserve. For more information, visit our webpage pasadena.edu/academics/support/mesa/.

Email us at mesa@pasadena.edu or call (626) 585-3085.

PCC Pathways Program and Pathways Center

Room V102, (626) 585-3046

PCC Pathways provides a comprehensive set of support services to increase students' success, persistence, and completion rates. The summer orientation, Jam, serves as the entry into PCC Pathways. Pathways students are required to maintain full-time student status and are rewarded with priority registration. They must enroll in math, English, and a first year seminar (College 1) in their first semester, meet regularly with their coach and counselor, develop an ePortfolio, and participate in an on-campus research conference. In their second and third years, Pathways students focus on career exploration, leadership, and self-efficacy as they complete their academic goal(s).

The PCC Pathways Center, located in V102, serves students enrolled in the four pathways: Athletes, International, Ujima, and XL. The center houses the Pathways staff, success coaches, and tutors and provides a variety of resources including a computer lab.

For more information: <https://pasadena.edu/academics/support/pathways/index.php>

GRADING SYSTEM

Unit of Credit

The standard unit represents one hour per week of classroom work or its equivalent carried for one semester of not less than 16 weeks of class work. The unit is also referred to as the semester hour.

In the case of academic subjects, the general rule is that not less than two hours (120 minutes) per week of preparation outside class are expected for each unit of class work. This conforms to the provision in the Education Code that "one credit hour of community college course work is approximately three hours of recitation, study or laboratory work per week throughout a term of 16 weeks."

In some courses, such as physical education, drafting, and laboratory, more than one hour in class each week is required for each unit. Course descriptions show the minimum number of hours that must be completed in order to earn the number of units of credit associated with each course.

Grades and Grade Points

Pasadena City College uses the letter system of grading to evaluate the quality of work done by students. The interpretation of each grade or symbol, with its value in grade points, is described below.

Grade or Symbol	Meaning	Quality Points Per Semester Unit
A Excellent		4
	HONOR GRADE indicating EXCELLENCE earned as a result of consistently superior examination scores; consistently accurate and prompt completion of assignments; ability to deal resourcefully with abstract ideas; superior mastery of pertinent skills; promise of success in a field relating to the subject.	
B Good		3
	HONOR GRADE indicating COMPETENCE earned as a result of high examination scores; accurate and prompt completion of assignments; ability to deal well with abstract ideas; commendable mastery of pertinent skills; promise of continued success in sequential courses.	
C Satisfactory		2
	STANDARD COLLEGE GRADE indicating SUCCESSFUL PERFORMANCE earned as a result of satisfactory examination scores; generally accurate and prompt completion of assignments; ability to deal with abstract ideas; fair mastery of pertinent skills; sufficient evidence of ability to warrant entering sequential courses. A "C" is the minimum course grade necessary to meet a prerequisite.	
D Less Than Satisfactory		1
	SUBSTANDARD GRADE indicating the MEETING OF MINIMUM REQUIREMENTS ONLY earned as a result of low examination scores; generally inaccurate, incomplete or late assignments; inadequate grasp of abstract ideas; barely acceptable mastery of pertinent skills; insufficient evidence of ability to make advisable the enrollment in sequential courses.	

A grade of "D" would indicate the student is not likely to be successful in a higher level course and would not meet prerequisite requirements.

F Failing	0
	NON-PASSING GRADE indicating FAILURE TO MEET MINIMUM REQUIREMENTS earned as a result of non-passing examination scores; inaccurate, incomplete or late assignments; failure to cope with abstract ideas; inadequate mastery of pertinent skills, repeated absence from class.
I Incomplete	0
	This symbol identifies UNFINISHED WORK OTHERWISE PASSING at a "C" or better level, indicating that an important assignment such as term paper, final examination or experiment is missing (for illness or other sufficient reason) but can be submitted to complete the course. An "I" is not assigned as a withdrawal grade and is not considered in grade-point average but it is included in the computation of progressive probation. A course for which an "I" has been assigned must be completed within one year from the end of the semester in which the "I" grade was assigned. After one year, a default grade will be assigned.
W Withdrawn	0
	A symbol recorded for a course when a student voluntarily withdraws; student is dropped from class by instructor; or petition is approved for a withdrawal. It is not considered in grade-point average but it is included in the computation of progressive probation.
MW Military Withdrawal	0
	A symbol used to record a student withdrawal due to unexpected military obligations.
EW Excused Absence	0
	A symbol used to record a student withdrawal due to documented extenuating circumstances.
P Passing	0
	PASSING GRADE, level of "C" or better, not considered in grade-point average but it is included in the computation of progressive probation.
NP No Pass	0
	CREDIT NOT ALLOWED; performance less than average quality; not considered in grade-point average but it is included in the computation of progressive probation.
IP In Progress	0
	Indicates work in progress but not considered in grade-point average. This symbol is intended for courses which may extend beyond the end of the normal semester.
RD Report Delayed	0
	Used when there is a delay in reporting grades. It is a temporary notation not considered in the grade-point average.

Grade-Point Average

The grade-point average (GPA) is computed by dividing the total quality points earned by the total number of GPA hours. Example: A student earning a grade of B in English 001A (4 units) would have a total of 12 grade points for the course ($4 \times 3 = 12$).

COURSE	UNITS	GRADE	GRADE POINTS
ENGL 001A	4	A (4 points)	16
STAT 050	4	B (3 points)	12
SPCH 001	3	C (2 points)	6
SOC 001	3	A (4 points)	12

To calculate the GPA, total the number of grade points and divide by the total number of units.

Total Grade Points: 46

Total Units: 13

GPA: 3.54 (46/13)

Pass/No Pass Grading

Most, but not all courses of the College are offered on a pass/no pass grading basis. The following provisions shall apply for pass/no pass credit grading:

1. A maximum of 12 units may be taken on this basis, with a limit of one class per semester.
2. Pass/no pass classes must be taken in areas outside the student's Baccalaureate Degree major.
3. The decision to take a class on a pass/no pass basis can be made through the first 28% of the course duration. For semester-length courses this is Friday of the fourth week. Request deadlines in short-term classes and Summer session are considerably earlier; check with the Registration Office, the online schedule, and the course CRN (Course Record Number) details for exact dates.
4. The pass/no pass grading option is not available through online registration. You must go to the Admissions and Records Office to complete a Request For Pass/No Pass Grading Form.
5. A grade of "P" (pass) represents satisfactory achievement which would have been graded C or better on the regular grading scale. A grade of "NP" (no pass) indicates unsatisfactory achievement which would have been graded with a D or lower on the regular grading scale.
6. Sequential courses may be taken on a pass/no pass basis.

7. Instructors are notified as to which students have elected the pass/no pass option in their courses at the time of grading.
8. Any restriction listed above does not apply when a class is offered only on a pass/no pass basis.
9. The request for pass/no pass grading is final and may not be reversed.

Some universities may not recognize pass/no pass grading or may limit the number of units. Please check with a counselor for clarification if you're planning on transferring.

Incomplete Grades

A grade of "I" is given by an instructor only in cases where a student is doing passing work at C or higher level, but for reasons beyond the student's control, is unable to complete the requirements of the course. The student must contact the instructor before the end of the semester and make arrangements for completing the required assignments.

When a grade of "I" is given, a "Contract for the Assignment of an Incomplete Grade" must be completed and signed by the instructor and the student. This contract lists specific conditions for removal of the "I" and the default grade to be recorded if the conditions are not met within one year from the end of the semester in which the "I" was assigned. A student must complete the remaining course assignments within one year, or the default grade will be recorded on the transcript. **Re-enrollment in the class as a way to make up the "I" is not allowed except in exceptional situations, such as a laboratory class.** When required work is made up, the grade earned is en-

tered on the student's transcript. "I" grades are not used in computing the grade-point average.

To meet graduation requirements, a student must achieve a minimum C average (2.000 GPA) for all lower division college units attempted in degree applicable courses, including transferred courses and grades. Students should be aware that "I" grades are computed as F grades when a student's records are being evaluated for graduation. A student's overall degree applicable GPA must be 2.000 to be eligible to graduate.

Authority on Grades

The instructor is the final authority on assignment of grades. When reported to the Admissions and Records Office, grades represent the instructor's final decision as to a student's achievement. Grades are not given as a warning, punishment or reward and are not subject to revision for purposes of determining eligibility for office or honors, college transfer or for any other reason except the subsequent discovery of an error (as a result of mistake, fraud, bad faith, or incompetence). Any change of grade submitted after the normal two-year holding period for backup materials will require documentation as to the nature of the error in the first grade.

Grade Reports

At mid-semester the instructor may issue midterm grades to students in LancerPoint. Final semester grades for all courses taken during the semester, regardless of the end date of the course, are available to students on Lancerpoint at the end of the semester.

Grade Appeal Process

The purpose of the academic grade appeal procedures is to provide a process by which a dispute in the assigned final grade for a course may be resolved in a full and efficient manner as provided in section 76224a of the California Education Code and section 55760a in the California Code of Regulations. The Grade Appeal Process can be found in the PACCD procedures No. 4051.10. The process and appropriate forms are available in the Office of the Vice President of Instruction (C231). The student must initiate any request for a grade change within the next regular semester following the award of the original grade.

PROBATION, DISMISSAL AND READMISSION

Academic Probation

A student who has attempted at least 12 semester units as shown by the official academic record shall be placed on

academic probation if the student has earned a GPA below 2.000 in all units which were graded.

Although a student on probation is limited to a maximum load of 12 units per semester, such students should consider limiting their enrollment to fewer units. Academic probation may be removed and regular status attained by achieving a cumulative grade-point average of 2.000 or higher. Probationary status is based upon grades received during or after Spring 1982.

Academic Dismissal

A student who is on academic probation shall be subject to dismissal if the student earned a cumulative GPA of less than 1.750 in all units attempted in each of 3 consecutive semesters. Dismissal calculations are based upon classes taken from Spring 1982 to the present. If a student has a semester grade-point average of 2.000 or higher in the semester in which the student would be dismissed, the student will not be dismissed but instead will continue on probation. Students are notified of their dismissal by email and LancerPoint. Dismissal students who are enrolled for the following semester are withdrawn from a primary term (Fall or Spring).

Students may petition to delay their first term of dismissal due to extenuating circumstances that affected their performance in the immediate prior term by submitting a Special Circumstances petition to petitions@pasadena.edu. They must attach verifying documentation to the petition to support the extenuating circumstance. Upon approval the student will be allowed to enroll in a prescribed number of units in the next primary term (Fall or Spring), and is required to all classes with a grade of C or better. Extenuating circumstances are defined as accident, illness or other circumstances beyond the student's control.

A dismissed student who waits the required number of terms may petition for readmission. The student must present positive evidence of a serious intent to succeed and have a realistic academic goal identified. If the petition is granted, the student will be admitted on a second stage academic probation and may have enrollment limitations. If the student is subsequently dismissed a second time due to continued substandard academic performance, a petition for readmission will not be considered until two or more semesters have lapsed. If readmitted following a second dismissal, the student will be placed on a second stage academic probation. If the student is subsequently dismissed a third time, a petition for readmission will not be considered until five years have lapsed.

Probation for Unsatisfactory Citizenship

Each student should be thoroughly familiar with the Standards of Student Conduct and with regulations of

the College. Students attending the College are expected to maintain satisfactory standards of citizenship at all times on the campus and in the community. Satisfactory citizenship includes conduct which respects the rights of all individuals, which avoids actions disruptive to the ongoing educational program and which does not violate specific prohibitions outlined in the Education Code.

When it is indicated that citizenship is unsatisfactory, the student may be subject to the following: reprimand, disciplinary probation, administrative class withdrawal, suspension or expulsion, as conditions warrant. Unsatisfactory citizenship includes, among other things, cheating, plagiarism, hazing and conduct disruptive to the teaching-learning process. In addition, falsification of information provided to the Admissions and Records Office is basis for dismissal from a class or from the College. Individuals engaged in destructive activities involving any kind of physical or psychological mistreatment of students are subject to prosecution under the California State Law banning hazing and to dismissal from the College. Penalties for individuals, organizations and institutions can be severe.

Progress Probation

A student who has enrolled in a total of at least 12 semester units as shown by the official academic record shall be placed on progress probation when the percentage of all units in which a student has enrolled and for which entries of "W," "I," "NP" and "NC" are recorded reaches or exceeds fifty percent (50 percent).

Although a student on progress probation is limited to a maximum load of 12 units per semester, such students should consider limiting their enrollment to fewer units. A student on progress probation because of an excess of units for which entries of "W," "I," "NP" and "NC" are recorded shall be removed from probation when the percentage of units in this category drops below fifty percent (50%). Probation calculations are based upon courses taken from Spring 1982 to the present.

Progress Dismissal

A student who has been placed on progress probation shall be subject to dismissal if the percentage of units in which the student has been enrolled for which entries of "W," "I," "NP" and "NC" are recorded in at least 3 consecutive semesters reaches or exceeds fifty percent (50%).

Dismissal calculations are based upon classes taken from Spring 1982 to the present. Students will be notified of the progress dismissal by email and LancerPoint. Students enrolled for the following semester will be withdrawn from the College.

Students may petition to delay their first term of dismissal due to extenuating circumstances that affected their performance in the immediate prior term by submitting a Special Circumstances petition to petitions@pasadena.edu. They must attach verifying documentation to the petition to support the extenuating circumstance. Upon approval the student will be allowed to enroll in a prescribed number of units in the next primary term (Fall or Spring), and is required to all classes with a grade of C or better. Extenuating circumstances are defined as accident, illness or other circumstances beyond the student's control.

A dismissed student who sits out the required number of terms may petition for readmission. The student must present positive evidence of a serious intent to succeed and have a realistic academic goal identified. If the petition is granted, the student will be admitted on progress probation and may have enrollment limitations (maximum number of units). If the student is subsequently dismissed a second time, a petition for readmission will not be considered until two or more semesters have lapsed. If readmitted, following a second dismissal, the student will be placed on a second stage progress probation. If the student gets dismissed a third time, a petition for readmission will not be considered until five years have lapsed.

Repetition of Courses

Repetition of courses (other than those noted below in Courses Repeatable for Credit below) is subject to the following conditions:

1. A student may not repeat a class in which he or she earned a grade of C, CR, P, or better unless he/she is eligible to repeat the class under one of the exceptions listed below under "Repetition of Courses".
2. A student is allowed up to three enrollments to earn a successful passing grade (A, B, C, or P) for a class. (For course repetition purposes, the defining characteristic of an enrollment is that it results in an entry on the student's permanent record, of a letter grade(A, B, C, D, F, W, I, NP), whether or not credit is received. Students may petition for a fourth attempt if they are able to provide verifiable documentation of extenuating circumstances of accident, illness or other circumstances beyond the student's control. Consult the college website (<http://www.pasadena.edu/admissions/academicinfo/petition.cfm>) or the Petitions Office in L113 for more information.
3. No student may enroll in two sections of the same course in the same part of term for any one semester, regardless of whether or not the course is repeatable for credit.

4. For courses in which D, F, W, or NP grades were earned, a C or better must be earned to have the substandard grade disregarded from calculating in the GPA. Although the original substandard grades will not be calculated in the student's GPA, they will appear on the student's transcript and will not be removed. The student's transcript is considered a true history of coursework completed at PCC.

Exceptions to Course Repetition

Students may petition to repeat a class they have passed with a grade of C/P/Cr or higher if they meet one of the following criteria and are able to provide the required verifiable documentation:

Repeating a Course Due to Significant Lapse of Time

Students may petition only one (1) time to repeat a course in which a grade of C, P, CR or higher was earned by meeting the following conditions:

1. The course was successfully completed more than thirty-six (36) months prior, and
2. One of the following is true:
 - a) the District has established a recency prerequisite for the course or;
 - b) another institution of higher education to which the student seeks to transfer has established a recency requirement which the student will not be able to satisfy without repeating the course in question.
 - i. A student may petition to repeat a course where less than 3 years has elapsed if documents show that repetition is necessary for the student's transfer to the institution of higher education

Repetition Due to Legally Mandated

Training Requirement

Students may repeat a course any number of times where repetition is required to meet a legally mandated training requirement as a condition of continued paid or volunteer employment, regardless of the grade recorded each time.

Students will be required to verify the legally mandated training requirement for becoming employed or to maintain their volunteer or paid employment status by providing both of the following:

1. Written evidence that the course is legally mandated for the student's current paid or volunteer

employment. (e.g. a copy of building code statutes that require certain courses to be current for licensing purposes.) and

2. Written evidence from the student's employer or prospective employer stating that repetition of the course is required for the student to get or keep a paid or volunteer job, or evidence that the student is licensed to perform in a certain field (e.g. an EMT license, CPR certificate)
3. Other types of documentation may be considered by the designated approving administrator.

The term "legally mandated" is interpreted to mean "required by statute or regulation as a condition of paid or volunteer employment" and excludes administrative policy or practice. All grades and units received pursuant to this section will be included in calculation of the grade point average.

Repetition Due to Significant Change in Industry or Licensure Standard

Students are permitted to repeat courses any number of times where it is determined that there has been a significant change in industry or licensure standards and that the student will not be able to get or keep employment without repeating the course. This exception does not permit students to repeat a class to gain a promotion, or to voluntarily improve their skills. All grades and units received pursuant to this section will be included in calculation of the grade point average.

Students are required to verify that they meet the criteria for course repetition under this provision by providing the following:

1. Written evidence of the change in industry or licensure standards (e.g., updated requirements for renewal of a license or certification; a letter from an instructor verifying that software has changed substantially since the student completed the course) and
2. Written evidence from the student's employer or prospective employer stating that the student must take the course again to get or keep employment or a professional license.
3. Other types of documentation may be considered by the designated approving administrator.

Courses Repeatable for Credit: Certain courses may be repeated for additional experience and credit, and are so identified in their course descriptions by a “maximum credit” notation. A student may enroll in one of these exception courses once per semester and as many times as allowable until the maximum credit is earned. A student who receives a substandard grade in such a course may repeat the course for purposes of removing the substandard grade from calculating in the GPA (see above), as long as he or she has not reached the maximum number of enrollments allowed; if the student has already reached the maximum number of enrollments allowed, he or she must petition to repeat the course again.

Academic Renewal

The purpose of Academic Renewal, Title 5 (Sections 55764 and 55765 of the California Code of Regulations), is to disregard students’ previously recorded substandard academic performance when such work does not reflect current demonstrated ability. As a result, Academic Renewal allows students the benefits of their current level of ability and performance and does not permanently penalize them for poor performance in past semesters. Academic Renewal encourages students to continue their efforts toward their educational objectives when the weight of previously recorded substandard work would otherwise make the achievement of those objectives unlikely.

Academic Renewal is intended only to facilitate graduation from Pasadena City College (2.000 grade-point average) and/or enable qualified students to transfer to a four-year college or university. It is not applicable to students who wish to raise their grade-point averages beyond these stated goals.

Students may request academic renewal as a means to achieve the educational goals of graduation from Pasadena City College, completion of certificate programs, and/or enable transfer to a four-year college or university. It is not applicable to students who wish to raise their grade point average beyond these stated goals.

- **30 Unit Limit:** Students may petition to disregard previously recorded substandard coursework in no more than 30 units of work accomplished at Pasadena City College and when they meet the eligibility criteria.
- For the purpose of Academic Renewal, substandard coursework is defined as grades of D and F.
- Academic renewal may not be applied to any course that has been used to certify associate degree requirements or CSU-GE transfer general education breadth requirements.
- Academic renewal will not remove courses from the transcript but, once approved, will not count the courses and grades as part of the GPA.

Eligibility:

To qualify for academic renewal, students must do all of the following:

- Wait for twelve (12) months after the coursework to be disregarded is completed;
- Submit official transcripts of all college coursework attempted if from a college or university other than Pasadena City College;
- Demonstrate recent academic success based on the coursework they have completed at any regionally accredited college taken after the coursework that is being petitioned for exclusion through academic renewal. Recent academic success may be demonstrated by one of the following:
 - Completing at least 12 semester units with a minimum of 3.00 cumulative GPA, or
 - Completing at least 24 semester units with a minimum 2.50 cumulative GPA, or
 - Completing at least 36 semester units with a minimum 2.00 cumulative GPA

Pasadena City College will honor similar actions by other accredited colleges and universities in determining grade point averages and credits; however, academic renewal by Pasadena City College may not be honored by other colleges outside of PACCD. That determination will be made by each respective transfer institution.

Courses excluded through academic renewal still count as an enrollment attempt for purposes of course repetition and financial aid considerations.

Petition Process:

The petition form for this purpose, “Petition for Academic Renewal,” is available through the college Petitions website or from the Admissions & Records office, and is initiated by the student. It is recommended that students see a counselor before submitting a petition for Academic Renewal.

Recording of Academic Renewal:

Once a Petition for Academic Renewal is granted, the student’s permanent academic record shall be annotated by an Admissions and Records designee in such a manner that all work remains legible, insuring a true and complete academic history. Academic renewal actions are permanent and irreversible.

Petitions for Academic Renewal are submitted to the Petitions Committee online to petitions@pasadena.edu or to the petitions drop box outside the Admissions and Records Office (L113).

Transcripts of Record

At the request of a student and in the absence of any outstanding financial obligation to the College (see "Financial Obligations of Students" section), official transcripts of record will be forwarded to designated institutions or individuals. Such requests may be submitted online (www.pasadena.edu).

Under no circumstances will partial transcripts of the record earned at Pasadena City College be sent either to the student or to another institution.

Pasadena City College will accept responsibility for providing transcripts of record for course work completed at Pasadena City College only.

Transfer Course Work

Only those lower division college level courses transferred from accredited colleges and universities are evaluated for applicability to the Associate in Arts or Associate in Science Degree. There is no guarantee that courses taken at another college will be accepted for credit at Pasadena City College. Many factors are considered when evaluating a course for credit such as: the accreditation status of the college, the course content, educational quality and rigor, level of credit earned and appropriateness of the other college courses to programs offered at Pasadena City College. A passing score on a competency examination administered by Pasadena City College may be required before credit is granted for courses in mathematics or English taken at other colleges. Transcripts from other accredited colleges are not evaluated until the student has completed 15 units at Pasadena City College. Students may request an evaluation in the Counseling Office. Official transcripts of all previous college work must be submitted to the Admissions and Records Office.

To graduate, a student must achieve at least a C average (2.000 GPA) for all lower division college units attempted, including transferred grades and a 2.000 GPA in all courses taken at Pasadena City College which can be counted toward the degree for which the student has applied. (See Catalog sections on "The Associate in Arts Degree" and "The Associate in Science Degree.") Grade points in excess of those used in calculating a 2.000 GPA for units attempted at another collegiate institution cannot be used in calculating the C average at Pasadena City College. Grade points earned at other institutions, however, may be counted the same as Pasadena City College grade points in awarding scholarships and loans, in determining membership in honor societies.

Credit by Examination and Advanced Placement

Advanced Placement Policy

Students who have completed Advanced Placement Examinations of the College Entrance Examination Board (Box 592, Princeton, New Jersey 08540) shall receive credit for Pasadena City College courses as listed below. A grade of "Pass" will be assigned to each student who obtains a score of 3, 4, or 5, except as noted. Credit earned by Advanced Placement may be counted towards Associate Degree requirements, IGETC, and CSU General Education Breadth Requirements. The UC Policy for AP credit can be found at: <http://admission.universityofcalifornia.edu/counselors/exam-credit/ap-credits/index.html>. The CSU also has a system-wide policy for these and other AP exams for awarding transfer credit for admission. The CSU policy for AP can be found at <http://www.calstate.edu/transfer/requirements/advanceplacementapcourses.shtml>.

The units earned from Advanced Placement do not apply toward the Pasadena City College residency requirements for graduation. (See page 28.) To request credit, students must submit official copies of Advanced Placement Examination test scores with a Student Petition form to the Office of the Vice President for Student and Learning Services, L112. The list on the following pages has been approved by PCC's Curriculum and Instruction Committee with restrictions as indicated:

College Credit for Advanced Placement (AP) Tests

Students may earn credit for College Entrance Examination Board (CEEB) Advanced Placement (AP) Tests with scores of 3, 4, or 5. AP credit can be used to meet IGETC, CSU GE, and Associate degree general education and/or major requirements. Students must have the College Board (<http://www.apscore.collegeboard.org/scores>) send AP exam results to the Admissions and Records Office (unopened hand carried copies will be accepted) for use on the Associate degree or transfer patterns. Course credit and units granted at Pasadena City College may differ from course credits and units granted by a transfer institution or by another community college.

EXAM	PCC (MAJOR AND/OR GE)	CSU GE BREADTH AREA ¹ AND MINIMUM UNITS EARNED ²	CSU-UNITS EARNED TOWARD TRANSFER	IGETC	UC-UNITS EARNED TOWARD TRANSFER
Art History	Score of 4 or 5 – Art 001A or 001B (3 semester)	Area C1 or C2 3 semester	6 semester	Area 3A or 3B 3 semester	8 quarter/5.3 semester
Art (Studio)	Drawing Portfolio – Art 011A (3 semester)	N/A	3 semester	N/A	8 quarter/5.3 semester Maximum 8 quarter for all 3 AP Art Studio exams
Art (Studio)	Studio Art Portfolio – Art Elective Credit for 2D Design or 3D Design subject to division recommendation (3 semester per exam)	N/A	3 semester		8 quarter/5.3 semester Maximum 8 quarter for all 3 AP Art Studio exams
Biology	Score of 3, 4, or 5 – Biology 011 (4 semester)	Area B2 and B3 4 semester	6 semester	Area 5B and 5C 4 semester	8 quarter/5.3 semester
Calculus AB	Score of 3 or 4 – Math 009 (5 semester) and placement into Math 005A Score of 5 – Math 005A (5 semester) and placement into Math 005B	Area B4 3 semester	3 semester*	Area 2A 3 semester	4 quarter/2.7 semester**
Calculus BC	Score of 3 or 4 – Math 005A (5 semester) and placement into Math 005B Score of 5 – Math 005B (5 semester) and placement into Math 005C	Area B4 3 semester	6 semester*	Area 2A 3 semester	8 quarter/5.3 semester**
Calculus BC/AB Subscore of 3 ³		N/A	3 semester*	Area 2A 3 semester	
AP CALCULUS AND COMPUTER SCIENCE EXAM LIMITATIONS					
	*Only one AP exam in Calculus or Computer Science may be used toward CSU baccalaureate **Maximum 8 quarter/5.3 semester for both				
Chemistry ⁴	Score of 3 or 4 – Chemistry 022 (4 semester) and placement into Chemistry 001A Score of 5 – Chemistry 001A (5 semester)	Area B1 and B3 4 semester	6 semester	Area 5A and 5C 4 semester	8 quarter/5.3 semester
Chinese Language & Culture	Score of 3 – Chinese 001 (5 semester) Score of 4 – Chinese 002 (5 semester) Score of 5 – Chinese 003 (5 semester)	Area C2 3 semester	6 semester	Area 3B and 6A 3 semester	8 quarter/5.3 semester
Computer Science A	Score of 3, 4, or 5 – CS 001 (5 semester)	N/A	3 semester***	N/A	2 quarter/1.3 semester
Computer Science AB	Score of 3, 4, or 5 – CS 002 (5 semester)	N/A	6 semester***	N/A	4 quarter/2.7 semester****
AP COMPUTER SCIENCE AND CALCULUS EXAM LIMITATIONS					
	Only one AP exam in Computer Science or Calculus may be used toward CSU baccalaureate *Maximum 4 quarter/2.7 semester for both				
Economics - Macroeconomics	Score of 3, 4, or 5 – Economics 001A (3 semester)	Area D 3 semester	3 semester	Area 4 3 semester	4 quarter/2.7 semester

EXAM	PCC (MAJOR AND/OR GE)	CSU GE BREADTH AREA ¹ AND MINIMUM UNITS EARNED ²	CSU-UNITS EARNED TOWARD TRANSFER	IGETC	UC-UNITS EARNED TOWARD TRANSFER
Economics - Microeconomics	Score of 3, 4, or 5 – Economics 001B (3 semester)	Area D 3 semester	3 semester	Area 4 3 semester	4 quarter/2.7 semester
English - Language & Composition	Score of 3, 4 or 5 – English 001A (4 semester)	Area A2 3 semester	6 semester	Area 1A 3 semester	8 quarter/5.3 semester*****
English - Literature & Composition	Score of 3, 4 or 5 – English 001A (4 semester)	Area A2 and C2 6 semester	6 semester	Area 1A or 3B 3 semester	8 quarter/5.3 semester*****
AP ENGLISH EXAM LIMITATIONS					
	*****Maximum 8 quarter/5.3 semester for both				
Environmental Science	Score of 3, 4, or 5 – Envs 001 (4 semester) <i>(formerly Biology 37/Physical Science37)</i>	Area B1 and B3 4 semester	4 semester	Area 5A and 5C 3 semester	4 quarter/2.7 semester
French Language and Culture	Score of 3 – French 001 (5 semester) Score of 4 – French 002 (5 semester) Score of 5 – French 003 (5 semester)	Area C2 3 semester	6 semester	Area 3B and 6A 3 semester	8 quarter/5.3 semester
French Literature		Area C2 3 semester <i>(if taken prior to Fall 2009)</i>	6 semester	Area 3B and 6A 3 semester	8 quarter/5.3 semester
German Language & Culture	Score of 3 – German 001 (5 semester) Score of 4 – German 002 (5 semester) Score of 5 – German 003 (5 semester)	Area C2 3 semester	6 semester	Area 3B and 6A 3 semester	8 quarter/5.3 semester
Government and Politics - Comparative Government	Score of 3, 4, or 5 – Political Science 002 (3 semester)	Area D 3 semester	3 semester	Area 4 3 semester	4 quarter/2.7 semester
Government and Politics - U.S. Government	Score of 3, 4, or 5 – Political Science 001* (3 semester)	Area D and US 2** 3 semester	3 semester***	Area 4 3 semester	4 quarter/2.7 semester
AP GOVERNMENT AND POLITICS EXAM LIMITATIONS					
	*Also requires passing California state and local exam - Social Sciences Division **Does not fulfill American Institutions California Government requirement ***Student can satisfy the American Institutions-California Government requirement after transfer				
History - European	Score of 3, 4, or 5 – History 001B (3 semester)	Area C2 or D 3 semester	6 semester	Area 3B or 4 3 semester	8 quarter/5.3 semester
History - U.S.	Score of 3, 4, or 5 – History 007A (3 semester)	Area C2 or D and US 1 3 semester	6 semester	Area 3B or 4 3 semester	8 quarter/5.3 semester
History - World		Area C2 or D 3 semester	6 semester	Area 3B or 4 3 semester	8 quarter/5.3 semester
Human Geography		Area D 3 semester	3 semester	Area 4 3 semester	4 quarter/2.7 semester

EXAM	PCC (MAJOR AND/OR GE)	CSU GE BREADTH AREA ¹ AND MINIMUM UNITS EARNED ²	CSU-UNITS EARNED TOWARD TRANSFER	IGETC	UC-UNITS EARNED TOWARD TRANSFER
Italian Language & Culture	Score of 3 – Italian 001 (5 semester) Score of 4 – Italian 002 (5 semester) Score of 5 – Italian 003 (5 semester)	Area C2 3 semester	6 semester	Area 3B and 6A 3 semester	8 quarter/5.3 semester
Japanese Language & Culture	Score of 3 – Japanese 001 (5 semester) Score of 4 – Japanese 002 (5 semester) Score of 5 – Japanese 003 (5 semester)	Area C2 3 semester	6 semester	Area 3B and 6A 3 semester	8 quarter/5.3 semester
Latin – Literature or Vergil		Area C2 3 semester	6 semester	Area 3B and 6A 3 semester	4 quarter/2.7 semester
Music Theory	Score of 3, 4, or 5 – Music 001A (3 semester)	Area C1 3 semester (if taken prior to Fall 2009)	6 semester	N/A	8 quarter/5.3 semester (Full Music Theory Exam required)
Physics B* (Replaced by Physics 1 & 2, effective 2014-15)	Score of 3, 4, or 5 – Physics 010 (3 semester)	B1 and B3 4 semester	4 semester****	Area 5A and 5C 4 semester	8 quarter/5.3 semester****
Physics 1 ⁴	Score of 3, 4, or 5 – Physics 002A (3 semester)	B1 and B3 4 semester	4 semester****	Area 5A and 5C 4 semester	8 quarter/5.3 semester****
Physics 2 ⁴	Score of 3, 4, or 5 – Physics 002B (3 semester)	B1 and B3 4 semester	4 semester****	Area 5A and 5C 4 semester	8 quarter/5.3 semester****
Physics C- Mechanics ⁴	Score of 3, 4, or 5 – Physics 031A (4 semester)	Area B1 and B3 4 semester*	4 semester****	Area 5A and 5C 3 semester	4 quarter/2.7 semester****
Physics C- Electricity/ Magnetism ⁴	Score of 3, 4, or 5 – Physics 031B (4 semester)	Area B1 and B3 4 semester*	4 semester****	Area 5A and 5C 3 semester	4 quarter/2.7 semester****
AP PHYSICS EXAM LIMITATIONS					
	****Maximum 4 semester toward GE and 6 semester toward CSU baccalaureate *****Maximum 8 quarter/ 5.3 semester for all Physics exams				
Psychology	Score of 3, 4, or 5 – Psychology 001 (3 semester)	Area D 3 semester	3 semester	Area 4 3 semester	4 quarter/2.7 semester
Spanish Language & Culture	Score of 3 – Spanish 001 (5 semester) Score of 4 – Spanish 002 (5 semester) Score of 5 – Spanish 003 (5 semester)	Area C2 3 semester	6 semester	Area 3B and 6A 3 semester	8 quarter/5.3 semester
Spanish Literature & Culture		Area C2 3 semester	6 semester	Area 3B and 6A 3 semester	8 quarter/5.3 semester
Statistics	Score of 3 or 4 – Statistics 015 or 018 (4semester) Score of 5 – Statistics 050 (4 semester) Maximum credit - one Statistics course only	Area B4 3 semester	3 semester	Area 2 3 semester	4 quarter/2.7 semester

- ¹ Areas of GE Breadth (A1 through E) are defined in EO 1033. Areas of American Institutions (US-1 through US-3) are set forth in Sections IA and IB of EO 405, and at www.assist.org.
- ² These units count toward eligibility for admission. The units may not all apply toward certification of the corresponding GE-Breadth area. See Executive Orders 1033 and 1036 for details.
- ³ Students who take the Calculus BC examination and earn a subscore of 3 or higher on the Calculus AB portion will receive UC credit for the Calculus AB examination, even if they do not receive a score of 3 or higher on the BC examination
- ⁴ **Advisory to Pre-med Students:** Even though AP scores may place students into a higher level chemistry or physics course, many medical schools do not accept AP credit in lieu of college level course credit to fulfill admissions requirements. Students interested in medical school should consult directly with the medical schools they are considering for information on their credit policies. Students may also want to refer to www.aamc.org or www.aacom.org.

Traditional Associate degree: Students should be aware that AP test credit is evaluated by corresponding it to an equivalent PCC course, e.g., History 7A. A student who receives AP credit and then takes the equivalent PCC course will have the unit credit for such duplication deducted prior to being awarded the Associate degree. Credit by Advanced Placement exam is noted and listed on a student's transcript, with units assigned and a grade of "Passing".

CSU GE: The Advanced Placement examinations may be incorporated into the certification of CSU General Education-Breadth requirements by any certifying institution. All CSU campuses will accept the minimum units shown and apply them toward fulfillment of the designated General Education-Breadth area if the examination is included as part of a full or subject-area certification. Please note that individual CSU campuses may choose to grant more units than those specified toward completion of General Education-Breadth requirements.

IGETC: AP exams must be used in area indicated regardless of where the certifying CCC's discipline is located.

College Level Examination Program

The College will grant a maximum of 6 units elective credit based on scores recommended by the American Council of Education in each General Examination of the College Level Examination Program (CLEP) of the College Entrance Examination Board (Box 1821, Princeton, New Jersey 08540). Subject credit, rather than elective credit, may be granted upon recommendation of the division.

College Level Examination Program (CLEP) IN CSU General Education (G.E.) Breadth Certification

Some CLEP exams may be used on the CSU General Education Breadth Certification. Students must have the College Board (<https://clep.collegeboard.org>) send CLEP exam results to the Admissions and Records Office (unopened hand carried copies will be accepted) for use on the CSU G.E. pattern. CLEP exams may not be used on IGETC, the UC system does not recognize the exams. CLEP units will not be posted to the PCC transcript.

CLEP transfer credit for CSU admission is determined by the CSU system. The CSU policy for CLEP on the CSU General Education Breadth Certification can be found on the CSU system website. See Use of Advanced Placement, International Baccalaureate, and CLEP: <http://www.calstate.edu/transfer/requirements/thecollegelevelexaminationprogramclep.shtml>.

EXAM		CSU G.E. BREADTH AREA OR AMERICAN INSTITUTIONS ¹ (CSU - units earned toward breadth certification)	CSU-UNITS EARNED TOWARD TRANSFER ²
CLEP American Government	50	Area D - 3 semester units (<i>does not meet CSU American Institutions Requirement</i>)	3 semester units
CLEP American Literature	50	Area C2 - 3 semester units	3 semester units
CLEP Analyzing and Interpreting Literature	50	Area C2 - 3 semester units	3 semester units
CLEP Biology	50	Area B2 - 3 semester units (<i>no lab</i>)	3 semester units
CLEP Calculus	50	Area B4 - 3 semester units	3 semester units
CLEP Chemistry	50	Area B1 - 3 semester units (<i>no lab</i>)	3 semester units
CLEP College Algebra	50	Area B4 - 3 semester units	3 semester units
CLEP College Algebra - Trigonometry	50	Area B4 - 3 semester units	3 semester units
CLEP College Mathematics	50	n/a	0
CLEP Economics Principles of Macroeconomics	50	Area D - 3 semester units	3 semester units
CLEP Economics Principles of Microeconomics	50	Area D - 3 semester units	3 semester units
CLEP English Composition (no essay)	50	n/a	0
CLEP English Composition with Essay	50	n/a	0
CLEP English Literature	50	Area C2 - 3 semester units	3 semester units
CLEP Financial Accounting	50	n/a	3 semester units
CLEP French ³ Level I	50	n/a	6 semester units
CLEP Freshman College Composition	50	n/a	0
CLEP German ³ Level I	50	n/a	6 semester units
CLEP History, United States I	50	Area D + US History 1 - 3 semester units Requirement for CSU	3 semester units
CLEP History, United States II	50	Area D + US History 1 - 3 semester units Requirement for CSU	3 semester units
CLEP Human Growth and Development	50	Area E - 3 semester units	3 semester units
CLEP Humanities	50	Area C2 - 3 semester units	3 semester units
CLEP Information Systems and Computer Applications	50	n/a	3 semester units
CLEP Introduction to Educational Psychology	50	n/a	3 semester units
CLEP Introductory Business Law	50	n/a	3 semester units
CLEP Introductory Psychology	50	Area D - 3 semester units	3 semester units

EXAM		CSU G.E. BREADTH AREA OR AMERICAN INSTITUTIONS ¹ (CSU - units earned toward breadth certification)	CSU-UNITS EARNED TOWARD TRANSFER ²
CLEP Introductory Sociology	50	Area D - 3 semester units	3 semester units
CLEP Natural Sciences	50	Area B1 or B2 - 3 semester units (<i>no lab</i>)	3 semester units
CLEP Pre-Calculus	50	Area B4 - 3 semester units	3 semester units
CLEP Principles of Accounting	50	n/a	3 semester units
CLEP Principles of Management	50	n/a	3 semester units
CLEP Principles of Marketing	50	n/a	3 semester units
CLEP Social Sciences and History	50	n/a	0
CLEP Spanish ³ Level I	50	n/a	6 semester units
CLEP Trigonometry	50	Area B4 - 3 semester units	3 semester units
CLEP Western Civilization I	50	Area C2 or D6 - 3 semester units	3 semester units
CLEP Western Civilization II	50	Area D - 3 semester units	3 semester units

¹ Areas of GE Breadth (A1 through E) are defined in EO 1033. Areas of American Institutions (US-1 through US-3) are set forth in Sections IA and IB of EO 405, and at www.assist.org.

² These units count toward eligibility for admission. The units may not all apply toward certification of the corresponding GE-Breadth area. See Executive Orders 1033 and 1036 for details.

³ If a student passes more than one CLEP test in the same language other than English (e.g., two exams in French), then only one examination may be applied to the baccalaureate. For each test in a language other than English, a passing score of 50 is considered "Level I" and earns six units of baccalaureate credit; the higher score listed for each test is considered "Level II" and earns additional units of credit and placement in Area C2 of GE Breadth, as noted.

International Baccalaureate (IB) on the IGETC General Education (G.E.) Pattern

A score of 5, 6 or 7 on Higher Level exams is required for IGETC G.E. certification. IB units will not be posted to the PCC transcript.

Students must have the International Baccalaureate Organization (www.ibo.org) send IB exam results to the Admissions and Records Office (un-opened hand carried copies will be accepted) for use on the IGETC general education patterns.

INTERNATIONAL BACCALAUREATE (IB) EXAM	IGETC AREA
IB Biology HL	5B
IB Chemistry HL	5A
IB Economics HL	4
IB Geography HL	4
IB History (any region) HL	3B or 4*
IB Language A: Literature (any language, except English) HL	3B and 6A
IB Language A: Language and Literature (any language, except English) HL	3B and 6A
IB Language A: Literature (any language) HL	3B
IB Language A: Language and Literature \ (any language) HL	3B
IB Language B (any language) HL	6A
IB Mathematics HL	2A
IB Physics HL	5A
IB Psychology HL	4
IB Theatre HL	3A

*IB exam may be used in either area regardless of where the certifying CCC's discipline is located.

Example: History at a CCC is approved for Area 3B. The History IB may be used in Areas 3B or Area 4.

Actual IB transfer credit awarded for these and other IB exams for admission is determined by the UC system. The UC Policy for IB credit can be found on the UC system website: <http://admission.universityofcalifornia.edu/counselors/exam-credit/ib-credits/index.html>

International Baccalaureate (IB) on the CSU General Education (G.E.) Breadth Certification

A score of 4, 5, 6, or 7 is required for CSU G.E. Breadth Certification. IB units will not be posted to the PCC transcript.

Students must have the International Baccalaureate Organization (www.ibo.org) send IB exam results to the Admissions and Records Office (un-opened hand carried copies will be accepted) for use CSU G.E. Breadth Certification.

INTERNATIONAL BACCALAUREATE (IB) EXAM	PASSING SCORE	CSU G.E. BREADTH AREA	CSU-UNITS EARNED TOWARD G.E. BREADTH CERTIFICATION	CSU-UNITS EARNED TOWARD TRANSFER
IB Biology HL	5	B2	3	6
IB Chemistry HL	5	B1	3	6
IB Economics HL	5	D	3	6
IB Geography HL	5	D	3	6
IB History (any region) HL	5	C2 or D	3	6
IB Language A Literature HL	4	C2	3	6
IB Language A Language and Literature HL	4	C2	3	6
IB Language A1 (any language) HL	4	C2 (If taken prior to Fall 2013)	3	6
IB Language A2 (any language) HL	4	C2 (If taken prior to Fall 2013)	3	6
IB Language B (any language) HL	4	n/a	0	6
IB Mathematics HL	4	B4	3	6
IB Physics HL	5	B1	3	6
IB Psychology HL	5	D	3	3
IB Theatre HL	4	C1	3	6

Actual IB transfer credit awarded for these and other IB exams for admission is determined by the CSU. The CSU Policy for IB credit can be found on the CSU system website. See Use of Advanced Placement, International Baccalaureate, and CLEP Examinations at: <http://www.calstate.edu/transfer/requirements/internationalbaccalaureateib.shtml>.

Credit-by-Examination – Pasadena City College Courses

Granting of credit-by-examination must meet the following criterion:

1. The student is currently enrolled and attending the College in at least one graded course (the requested credit-by-exam course does not meet these criteria).
2. The course is listed in the *PCC College Catalog* and is not primarily of an activity nature and is not in the qualifying or remedial category. Credit-by-examination is not available for the native language of a student or for subjects which appear on the student's high school transcript. Credit is not available for any course which is lower in a sequence than a course in which credit has already been granted. Unique situations may be referred to the Petitions Committee.
3. The student is in good standing, has all required transcripts on file at the College and has completed 15 or more units in residence with an overall 2.000 or higher grade-point average.
4. The student has never failed the course and has not been enrolled in the class during the semester for which the examination is being requested.
5. The student may attempt credit-by-examination only once in a particular course.
6. Maximum credit-by-examination for courses of the College is 12 units. The credit will be recorded in the term in process when the examination results are submitted to the Admissions and Records Office. Credit will not be posted to prior terms.
7. Credit by examination courses are graded on a pass or no pass basis.
8. Approval is required from the division dean responsible for the area in which credit will be given and the Director of Admissions and Records.

Students will be required to pay all applicable fees (enrollment, non-resident tuition, etc.) at Student Business Services before any credit-by-examination is taken.

Recording and Utilization of Credit-by-Examination, CLEP and AP

Credit will be recorded with a grade of P after the student satisfactorily completes 15 or more units at Pasadena City College. It may be utilized in meeting requirements for the Associate in Arts or Associate in Science Degree. Units granted will not be used in determining eligibility for College activities, or in certifying for financial aid, Veteran's Educational Assistance, or in certifying enrollment to an outside agency.

Transfer students should be aware that four-year colleges may have different criteria for recognizing elective academic credit from non-classroom sources and that a new evaluation of experiences will often be required upon transfer.

Credit for Military Training and Experience:

Pasadena City College strives to serve our nation's military members by offering a comprehensive review of all previous academic and military education and training to earn maximum credit toward degree and certificate programs at Pasadena City College.

Depending on your military training, Pasadena City College can apply college credit to your degree program.

- For service members and veterans of the U.S. Army, submit an AARTS transcript. <https://aartstranscript.army.mil/>
- For service members and veterans of the U.S. Navy & Marine Corps, submit a SMART transcript. https://www.navycollege.navy.mil/smart_info.cfm
- For service members and veterans of the U.S. Air Force, submit a transcript from the *Community College of the Air Force*. <http://www.au.af.mil/au/ccaf/>
- For service members and veterans of the U.S. Coast Guard, submit a transcript from the U.S. Coast Guard Institute. <http://www.uscg.mil/hr/cgi/i>
- For service members who left the military before 1986, the college can apply credits from a notarized DD 214.

Evaluation of Credit From Military and Other Service

All veteran students wishing to receive veteran educational benefits must submit for evaluation official transcripts of all prior college and military training before benefits will be processed. Documentation of military training (DD2586 Army/American Council on Education Registry Transcript [AARTS], DD295, DD214, Community College of the Air Force transcript) should be submitted to the Admissions and Records Office, Building L, Room 113.

Credit for experiences in the military service and USAFI/DANTES tests may be allowed as recommended by the American Council on Education and in accordance with the provisions of the *Pasadena City College Catalog*.

Maximum Credit-by-Examination and Other Nontraditional Education

A student may be granted no more than 30 units through any combination of credit-by-examination (AP, CLEP, or PCC examinations) and evaluation of military service.

Credit Limitations in Basic Skills

Students are limited to enrolling in a maximum of 30 units of Basic Skills courses (e.g., those numbered 400 and above.) Students enrolled in ESL courses and students who have learning disabilities are exempt from this limitation.

Credit Limitations in Foreign Language

Students will not receive credit in elementary courses (semesters 1 and 2) of a foreign language offered at PCC if that language is the primary language in which they received their secondary education. Students may petition for exceptions based on special circumstances.

Auditing of Classes

Policy No. 4071: It is the policy of the Pasadena Area Community College District to allow students to audit courses when space is available in course sections and students seeking to enroll for credit are not displaced. Students who are enrolled in classes to receive credit for ten or more semester credit units shall not be charged a fee to audit three or fewer semester units during a primary semester. No student auditing a course shall be permitted to change his/her enrollment in that course to receive credit for the course. The fee for auditing courses shall be no more than the amount established by the California Education Code. The Superintendent/President shall establish procedures regarding compliance with statutory and regulatory criteria for auditing courses.

Financial Obligations of Students

Students or former students are expected to meet proper financial obligations due to the District. Pursuant to California Education Code, Section 72237, college services such as grades, transcripts, diplomas, registration privileges or any combination thereof may be withheld from any student or former student who has not made satisfactory arrangements to meet his/her financial obligation to the District.

Student Records

The following are College policies relating to the Family Educational Rights and Privacy Act of 1974, Public Law P.L. 93-380, and Chapter 816, Statutes of 1975, State of California.

I Definition of Education Records

Education records consist of those files maintained by the following offices: Admissions and Records, Assessment, Financial Aid, Counseling, Health Services, Office of Student Services and those files maintained for individual students by academic divisions.

II Access to Education Records

All students have the right to inspect and review their records. A student who follows the established procedure of the Admissions and Records Office shall be granted access to his or her records within 15 days of the request. Expressly **exempt from the right of review and inspection** are the following materials:

- A. Financial records of the parents of the students.
- B. Confidential letters and statements of recommendation which were placed in the education records prior to Jan. 1, 1975.
- C. Records of instructional, supervisory, counseling and administrative personnel which are in their sole possession and are not accessible or revealed to any other person except a instructor substituting for the one in sole possession.
- D. Records of students made and maintained by the College Health Center and the Learning Disabilities Center, which are used in the treatment of students and which are not available to persons other than those providing such treatment; except that such records can be reviewed by an appropriate professional of the student's choice.

III Procedure for a Student's Access to Records

- A. A student may review his or her records upon appropriate identification and in conference with a College Counselor or other certificated Student Services staff member.
- B. A former student may request in writing a review of his or her records. The request should be directed to the Director of Admissions and Records who is the designated "Records Officer" acting for the President of the College.
- C. Any student request for review shall be granted within 15 days following the request.

IV Procedure for Challenge of Accuracy or Content of Education Records

- A. Informal
A student may submit to the Director of Admissions and Records a Student Petition to chal-

lenge the accuracy or content of education records maintained by the College. The Student Petition must be supported with verifying documentation. The Petition Committee will rule on the request and notify the student. Any student not satisfied with the decision of the Petitions Committee may discuss the matter with the Vice President of Student Services.

B. Formal

If the student is not satisfied with the determination made by the Vice President of Student Services, the student may, within 30 days, appeal the decision in writing to the President of the College.

V Release of Education Records Information

A. Any release of a student's education records, with the exceptions listed, must be with the student's written consent or request.

B. Directory information – In accordance with the Federal Family Educational Rights and Privacy Act of 1974 and the California Educational Code, Pasadena City College will make public upon request and without student consent certain "directory information." This information consists of the following: a student's name; city of residence; major field of study; participation in officially recognized activities and sports; if a member of an athletic team, weight, height and age; dates of attendance; degree and awards received; and the most recent previous educational institution attended by the student. Any student desiring to withhold directory information and who did not indicate such at the time of admission to the College may submit a written request to the Admissions and Records Office in the L Building.

The College is required to release student names, addresses, and telephone numbers to armed forces recruiters, per the Solomon Act, without first obtaining a student's permission. In addition, the College is required to release information to the U.S. Department of Education and the Federal Internal Revenue Service regarding fees paid and financial aid received based on the Hope and Opportunity for Post-secondary Education Act of 1997. Information is also released to the National Student Clearinghouse.

C. Without the student's written consent and upon authorization of the Director of Admissions and Records or his/her designee, the College may re-

lease copies of, or otherwise divulge, material in student education records to the following agencies and individuals who are expressly forbidden from permitting access of said education records to third parties:

1. College and District staff with a need to know. Authorized representatives of the Comptroller General of the United States, the Secretary of Education, an administrative head of an education agency, state education officials, or their respective designees of the United States Office of Civil Rights, where such information is necessary to audit or evaluate a state or federally supported education program or pursuant to a federal or state law provided that, except when collection of personally identifiable information is specifically authorized by federal law, any data collected by such officials shall be protected in a manner which will not permit the personal identification of students or their parents by other than those officials. Such personally identifiable data shall be destroyed when no longer needed for such audit, evaluation and enforcement of federal legal requirements.
2. Other state and local officials or authorities to the extent that information is specifically required to be reported pursuant to state law adopted prior to Nov. 19, 1974.
3. Officials of other public or private schools or school systems, including local county, or state correctional facilities where educational programs are provided, where the student seeks or intends to enroll, or is directed to enroll, subject to the rights of students.
4. Agencies or organizations in connection with a student's application for, or receipt of, financial aid; provided that information permitting the personal identification of students may be disclosed only as may be necessary for such purposes as to determine the eligibility of the student for financial aid, to determine the amount of the financial aid, to determine the conditions which will be imposed regarding the financial aid, or to enforce the terms or conditions of the financial aid.
5. Accrediting organizations in order to carry out their accrediting functions.

6. Organizations conducting studies for, or on behalf of, educational agencies or institutions for the purpose of developing, validating, or administering predictive tests, administering student aid programs and improving instruction, if such studies are conducted in such a manner as will not permit the personal identification of students or their parents by persons other than representatives of such organizations. Such information will be destroyed when no longer needed for the purpose for which it is collected.
7. Appropriate persons in connection with an emergency if the knowledge of such information is necessary to protect the health or safety of a student or other persons, or subject to such regulations as may be issued by the Secretary of Education.
8. Those who have obtained a subpoena or judicial order. The student is given notice by mail of the College's compliance with the order.

VI Record of Access

The College will maintain an access list which includes the identity of persons who have requested and have been denied or who have had access to student records, the dates of said requests, and the reasons for such access. The access list is not required of College officials.

VII Transfer of Information by Third Parties

Education records or personal information transferred to a third party will include a notice that such party shall not permit access by any other party without the written consent of the student.

VIII Notice of Student Rights

Students will be informed at least annually through the Pasadena City College Catalog of their rights under the Act.

PASADENA CITY COLLEGE
CATALOG
2019-2020

Policies and Regulations



SECTION III

POLICIES AND REGULATIONS

BP 3430 Prohibition of Harassment

All forms of harassment are contrary to basic standards of conduct between individuals and are prohibited by state and federal law, as well as this policy, and will not be tolerated. Pasadena Area Community College District (District) is committed to providing an academic and work environment that respects the dignity of individuals and groups. The District shall be free of sexual harassment and all forms of sexual intimidation and exploitation including acts of sexual violence. It shall also be free of other unlawful harassment, including that which is based on any of the following statuses: national origin, religion, age, gender, gender identity, gender expression, race or ethnicity, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, pregnancy, military or veteran status, or because one is perceived to have one or more of the foregoing characteristics, or based on one's association with a person or group with one or more of these actual or perceived characteristics.

Any student or employee who believes that he/she has been harassed or retaliated against in violation of this policy should immediately report such incidents to the Vice President of Human Resources, or an administrative official such as the Vice President/Assistant Superintendent, Assistant Vice President, or the President/Superintendent. Supervisors are mandated to report all incidents of harassment and retaliation that come to their attention.

Employees who violate the policy and procedures may be subject to disciplinary action up to and including termination. Students who violate this policy and related procedures may be subject to disciplinary measures up to and including expulsion.

The District's harassment and discrimination policy and procedure are available in the Human Resources Office – Room C204, and can be found on the District website at: <https://www.boarddocs.com/ca/pasadena/board.nsf/goto?open&id=am2q546341ac#> (BP-340 Prohibition of Harassment Policy) and <https://www.boarddocs.com/ca/pasadena/board.nsf/goto?open&id=am2q546341ac#> (AP Prohibition of Harassment Procedure)

BP 3410 Nondiscrimination

Pasadena Area Community College District (District) is committed to equal opportunity in educational programs, employment, and all access to institutional programs and activities. The District, and each individual who represents the District, shall provide access to its services, classes, and programs without regard to national origin, religion, age, gender, gender identity, gender expression, race or ethnicity, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, pregnancy, military or veteran status, or because he/she is perceived to have one or more of the foregoing characteristics, or based on his/her association with a person or group with one or more of these actual or perceived characteristics.

The District's nondiscrimination policy and procedure are available in the Human Resources Office – Room C204, and can be found on the District website at:

<https://www.boarddocs.com/ca/pasadena/Board.nsf/goto?open&id=AM2Q546341AC#>

(BP 3410 Nondiscrimination Policy) and

<https://www.boarddocs.com/ca/pasadena/Board.nsf/goto?open&id=AM2Q546341AC#> (BP 3410 Nondiscrimination Procedure)

BP 3420 Equal Employment Opportunity

Pasadena Area Community College District (District) affirms that diversity in the academic environment fosters cultural awareness, mutual understanding, harmony and respect, and suitable role models for all students. To that end, the District and Board of Trustees support the intent set forth by the California legislature to assure that efforts are made to build a community in which opportunity is equalized, and which fosters a climate of acceptance, with inclusion of faculty and staff from a wide variety of backgrounds. The District and Board is committed to promoting the total realization of equal employment through maintaining the District Equal Employment Opportunity (EEO) Plan.

The EEO Plan is available in the Human Resources Office – Room C204, and can be found on the District website at <http://www.pasadena.edu/HR/documents/FinalEEOPlan6-16-14.pdf> and the District's equal employment policy is available at http://www.pasadena.edu/ipro/documents/BP_3420_Equal_Employment_Opportunity.pdf (Equal Employment Opportunity Policy)

Academic Regulations

Academic Freedom

Policy No. 4030: It is the policy of the Pasadena Area Community College District that academic freedom is a right enjoyed by all members of the Pasadena City College community: faculty (tenured, non-tenured, and adjunct), students, classified and administrative staff, and Trustees. Academic freedom is defined as the freedom to teach and learn in an atmosphere of free inquiry and expression. The right to academic freedom, however, cannot be separated from the equally important responsibility, which each individual has, to uphold professional ethics or, in the case of students, to abide by the Policy on Student Conduct and Academic Honesty.

The District encourages and supports a healthy and constructive debate of campus issues, and respects the right of all members of the Pasadena City College community to freely evaluate, criticize, and/or advocate personal points of view regarding such issues. However, every member of the College community also has the right to work and study in an environment that is free from unlawful discrimination and harassment.

The right to academic freedom shall be protected and supported through the establishment and use, when necessary, of appropriate due process procedures.

Student Conduct and Academic Honesty

Board Policy No. 5500

The District seeks to maintain a safe, orderly, and constructive campus environment in which there is freedom to learn and respect for the dignity of all members of the College community. Students are expected to be responsible, honest, and non-violent in exercising their rights to free inquiry and free speech.

The District shall establish procedures which describe expected student conduct, penalties for misconduct, and a student discipline process.

The Superintendent-President shall establish procedures for the imposition of discipline on students in accordance with the requirements for due process of the federal and state law and regulations.

The procedures shall clearly define the conduct that is subject to discipline, and shall identify potential disciplinary actions, including but not limited to the removal, suspension or expulsion of a student.

The Board of Trustees shall consider any recommendation from the Superintendent-President for expulsion. The Board shall consider an expulsion recommendation in closed session unless the student requests that the matter be considered in a public meeting. Final action by the Board on the expulsion shall be taken at a public meeting.

The procedures shall be made widely available to students through the college catalog and other means.

The Student Conduct Code identifies conduct that is prohibited by College policy. Students who violate the Student Conduct Code will be subject to disciplinary action under the Student Discipline Process Procedures (AP 5520). Disciplinary sanctions depend on the nature of the offense, the past pattern of behavior of the student, and other relevant factors. Examples of possible disciplinary sanctions are listed below. In addition, student drug or alcohol offenses or other criminal acts, may be referred to law enforcement officials.

The following conduct shall constitute good cause for discipline, including but not limited to the removal, suspension or expulsion of a student. These types of conduct are prohibited at all times on College owned or controlled property and at any off-campus function sponsored or supervised by the College.

- Causing, attempting to cause, or threatening to cause physical injury to another person.
- Possession, sale or otherwise furnishing any firearm, knife, explosive or other dangerous object, including but not limited to any facsimile firearm, knife, or explosive, unless, in the case of possession of any object of this type, the student has obtained written permission to possess the item from a District employee, which is concurred in by the college president.
- Unlawful possession, use, sale, offer to sell, or furnishing, or being under the influence of, any controlled substance listed in Chapter 2 (commencing with Section 11053) of Division 10 of the California Health and Safety Code, an alcoholic beverage, or an intoxicant of any kind; or unlawful possession of, or offering, arranging or negotiating the sale of any drug paraphernalia, as defined in California Health and Safety Code Section 11014.5.
- Committing or attempting to commit robbery or extortion.
- Causing or attempting to cause damage to district property or to private property on campus.
- Stealing or attempting to steal District property or private property on campus, or knowingly receiving stolen District property or private property on campus.
- Attempted or actual theft or intentional damage to property of the College or any member of the College community or visitors. This includes theft of textbooks or sale of textbooks other than one's own and intentional damage to library resources.

- Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the college or the District.
- Committing sexual harassment as defined by law or by District policies and procedures.
- Engaging in harassing or discriminatory behavior based on disability, gender, gender identity, gender expression, nationality, race or ethnicity, religion, sexual orientation, or any other status protected by law.
- Engaging in intimidating conduct or bullying against another student through words or actions, including direct physical contact; verbal assaults, such as teasing or name-calling; social isolation or manipulation; and cyber-bullying;
- Willful misconduct which results in injury or death to a student or to college personnel or which results in cutting, defacing, or other injury to any real or personal property owned by the District or on campus.
- Sexual assault, defined as actual or attempted sexual contact with another person without that person's consent, regardless of the victim's affiliation with the community college, including, but not limited to, any of the following:
 - i. Intentional touching of another person's intimate parts without that person's consent or other intentional sexual contact with another person without that person's consent.
 - ii. Coercing, forcing, or attempting to coerce or force a person to touch another person's intimate parts without that person's consent.
 - iii. Rape, which includes penetration, no matter how slight, without the person's consent, of either of the following:
 - a. The vagina or anus of a person by any body part of another person or by an object.
 - b. The mouth of a person by a sex organ of another person. Sexual exploitation, defined as a person taking sexual advantage of another person for the benefit of anyone other than that person without that person's consent, regardless of the victim's affiliation with the community college, including, but not limited to, any of the following:
 - (1) Prostituting another person.
 - (2) Recording images, including video or photograph, or audio of another person's sexual activity, intimate body parts, or nakedness without that person's consent.
 - (3) Distributing images, including video or photograph, or audio of another person's sexual activity, intimate body parts, or nakedness, if the individual distributing the images or audio knows or should have known that the person depicted in the images or audio did not consent to the disclosure and objected to the disclosure.
- (4) Viewing another person's sexual activity, intimate body parts, or nakedness in a place where that person would have a reasonable expectation of privacy, without that person's consent, and for the purpose of arousing or gratifying sexual desire.
- Disruptive behavior, willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, college personnel.
- Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty.
- Dishonesty, forgery, alteration or misuse of college documents, records or identification; or knowingly furnishing false information to the District.
- Unauthorized entry upon or use of college facilities.
- Lewd, indecent, or obscene conduct on District-owned or controlled property or at District-sponsored or supervised functions.
- Engaging in expression which is obscene; libelous, or slanderous; or which so incites students as to create a clear and present danger of the commission of unlawful acts on college premises, or the violation of lawful District administrative procedures, or the substantial disruption of the orderly operation of the District.
- Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.
- Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction, including but not limited to handwritten or typewritten class notes, except as permitted by any Board policy or administrative procedure.
- Failure to comply with directions of College personnel acting in the performance of their duties, including failure to present the Pasadena City College ID card or current class schedule upon request.
- Misrepresentation of oneself or of an organization to be an agent of the College.
- Violation of rules and/or regulations governing student organization chartering, official activity approval, funds handling and management, and/or participation in such activities.
- Unauthorized use of computers and telecommunication resources, including but not limited to:
 - i. Unauthorized entry into a file to use, read, or change the contents, or for any other purpose;
 - ii. Unauthorized transfer of a file;
 - iii. Unauthorized use of another individual's identification and password;

- iv. Use of computing facilities to interfere with the work of another student, faculty member or College official;
- v. Use of computing and telecommunications resources to send obscene or abusive messages.
- vi. Use of any audio, video or other listening, recording or transmitting device in any classroom, service area or College activity without the prior consent of the instructor, College service provider or activity advisor except as necessary to provide reasonable auxiliary aids and academic adjustments to students with disabilities or as provided by regulation or law.

AP 5520-Student Disciplinary Procedures

The purpose of this administrative procedure is to provide a prompt and equitable means to address violations of the Standards of Student Conduct, which guarantees to the student or students involved the due process rights guaranteed them by state and federal constitutional protections. This procedure will be used in a fair and equitable manner, and not for purposes of retaliation. It is not intended to substitute for criminal or civil proceedings that may be initiated by other agencies.

The Administrative Procedure is specifically not intended to infringe in any way on the rights of students to engage in free expression as protected by the state and federal constitutions, and by Education Code Section 76120, and will not be used to punish expression that is protected.

DEFINITIONS

College District - Pasadena Area Community College District (PACCD).

Student - Any person who has applied, is currently enrolled as a student or is participating any program offered by the College District.

Instructor - Any academic employee of the College District in whose class a student subject to sanction is enrolled, or counselor who is providing or has provided services to the student, or other academic employee who has responsibility for the student's educational program.

Complainant - A person who submits a charge alleging that a student has violated the College's Student Code of Conduct.

Accused Student/Respondent - A student who has been accused of violating the Student Code of Conduct by a College District employee, student, or visitor.

Business Days - Unless otherwise provided, a business day shall mean a day during which the College District is in session and regular classes are held, excluding Saturdays, Sundays, and public holidays.

College District Property - Property under the control of the Pasadena Area Community College District or any place that is the site of a College District approved activity or function.

JURISDICTION OF THE COLLEGE

Sanctions for violations of the Student Conduct Code may be imposed for conduct which occurs on the College premises, in or out of the classroom setting, while using College technology, at off-campus instructional sites, during off-campus College-sponsored events and for off-campus conduct which materially and substantially interferes with the College's operational and educational programs.

FILING A COMPLAINT

Any person may allege a violation of the Student Conduct Code by completing a Student Conduct Incident Report Form and submitting it to the Office of Student Life or on-line. The College reserves the right to initiate a student conduct process based on available information, even if a formal complaint has not been received. The complaint shall describe the conduct in question and, if known, the name of the person or persons alleged to have engaged in that conduct. The filing of a complaint assumes that the complainant desires to initiate the inquiry that may result in official disciplinary action against the alleged violator. The complainant should file a complaint within a reasonable amount of time not to exceed 30 days from the date of the incident.

OVERVIEW OF THE STUDENT CONDUCT PROCESS

- Each student is responsible for reading and complying with the Standards of Conduct & Academic Honesty which is made available on the Pasadena City College website on the Office of Student Life page or in the Office of Student Life, Campus Center 105 and the College Catalog.
- Any member of the college community can initiate an accusation of an alleged violation.
- If a student is accused of an alleged violation, he or she will receive written notice of the conduct warranting discipline. The notice may include a request for a review meeting and will include :
 - a. The specific code violations;
 - b. A short statement of the facts supporting the accusation;
 - c. The right of the student to meet with the Dean of Student Life/Student Conduct Administrator or designee;

- d. Reference to the Student Conduct Code process and rights of students as indicated in the Code.
- e. The nature of the sanctions being considered.
- Time Limits - The notice must be provided to the student within thirty (30) business days of the date on which the conduct allegedly took place; in the case of continuous, repeated or ongoing conduct, the notice must be provided within ten (10) business days of the date on which conduct occurred which led to the decision to take disciplinary action.
- Meeting - If the student chooses to meet, or is requested to meet, with the Dean of Student Life or designee, the meeting must occur no sooner than five (5) business days after the notice is provided. At the meeting, the student must again be told the facts leading to the accusation, and must be given an opportunity to respond verbally or in writing to the accusation.
- Upon completion of the review meeting the student, if necessary, shall have the right to the following:
 - a. Be provided a list of findings by the Dean of Student Life/Student Conduct Administrator or designee;
 - b. Accept or deny responsibility.
 - c. Have sanctions imposed, if found in violation of the Student Conduct Code;
 - d. Request a hearing of the Student Conduct Hearing Panel should the student disagree with the finding(s) and sanction(s) of the Dean of Student Life/Student Conduct Administrator or designee (if sanction includes suspension, removal from a class or expulsion);
 - e. Be informed of the appropriate Policy & Procedure;
 - f. Be informed of his/her right to request a copy of their student conduct file.
- Students should be aware that the student conduct process is different from criminal and civil court proceedings. Procedures and rights in student conduct proceedings are conducted with fairness to all, but do not include the same protections of due process afforded by the courts. The standard used to determine whether a violation of the Student Conduct Code has occurred will be a preponderance of evidence (more likely than not). Due process within these procedures, assures timely written notice, a hearing before an objective decision-maker or panel (should one be requested) and a process for appeal.
- Students continue to be subject to city, state and federal laws while at Pasadena City College (PCC) and allegations, charges or violations of those laws may also constitute violations of the Student Conduct Code. In such instances, PCC may proceed with disciplinary action under the Student Conduct Code independently of any criminal proceeding involving the same conduct.

The College may impose sanctions for violation of the Student Conduct Code even if such criminal proceeding is not yet resolved or is resolved in the student's favor.

- No student will be found in violation of PCC policy without information showing by preponderance of the evidence that a policy violation has occurred. In PCC's sole discretion, sanctions will be proportionate to the severity of the violation(s).
- If a student is found responsible for one or more violations of the Student Conduct Code, the student's prior conduct record will be taken into consideration and may result in progressive sanctions because of a pattern of behavior.
- Within five (5) business days after meeting with the Dean of Student Life/Student Conduct Administrator as described above, the Dean of Student Life/Student Conduct Administrator or designee shall decide whether to impose expulsion, suspension, short-term suspension, whether to impose some lesser sanction, or whether to end the matter. Written notice of the Dean's or designee's decision shall be provided to the student. The notice will include the length of time of the suspension, or the nature of the lesser sanction.

DETERMINATION OF SANCTIONS

The following factors may be considered in determining what sanctions are appropriate in a particular case. While sanctions are applied equitably and fairly, it is done so with consideration for the uniqueness of each individual case.

- The nature of the violation(s).
- Prior violations and disciplinary history.
- Mitigating circumstances surrounding the violation.
- The student's motive or purpose for engaging in the behavior.
- Sanctions which have been imposed in similar cases in the past.
- The developmental and educational impact on the student.

POSSIBLE SANCTIONS

Multiple sanctions may be imposed including but not limited to:

A. Sanctions for Academic Dishonesty

Students found to be responsible for academic dishonesty may incur any of the below sanctions as well as the following:

- The instructor may assign a failing grade to the examination or assignment in which the alleged cheating or plagiarism occurred.
- The instructor may dismiss the student from the class or activity for the present and/or following class session(s) (total of 2 class sessions).

- The instructor or the Division administrator may require a meeting with the instructor and/or the Administrator.
- The instructor shall complete a Student Conduct Incident Report and forward a copy to the Division Administrator and the Dean of Student Life/Student Conduct Administrator.

B. Other Sanctions

Written or Verbal Reprimand - An admonition to the student to cease and desist from conduct determined to violate the College District's Student Code of Conduct. Written reprimands may become part of a student's permanent record at the College District. A record of the fact that a verbal reprimand has been given may become part of a student's record at the College District for a period of up to one (1) calendar year.

Educational Sanctions - including work assignments, essays, community service, behavioral contract, administrative referral or other related educational assignment;

Disciplinary Probation - Probation is for a designated period of time and includes the probability of more severe disciplinary sanctions if the student is found to be in violation of any institutional regulations during the probationary period. It may include restriction from contact with specified individuals, college activities, services, offices, or designated areas. Probation shall not be imposed for a period longer than a year.

Restitution - A payment to compensate an injured party for financial harm, in cases involving misconduct such as theft, destruction of property or deception.

Removal from Class/Facility/College District Entity - Any instructor/responsible manager may remove a student from the class, activity, office, department etc. for the day of the incident and one additional day. The instructor/responsible manager shall immediately report the removal to the Dean of Student Life/ Student Conduct Administrator or designee and his/her Dean or responsible administrator. The student shall not be returned to the class during the period of the removal without the concurrence of the instructor.

Withdrawal of Consent to Remain On Campus - The Dean of Student Life or designee and/or the College District's Campus Police Department, may notify any person for whom there is a reasonable belief that the person has willfully disrupted the orderly operation of the campus, that consent to remain on campus has been

withdrawn. If the person is on campus at the time, he/she must promptly leave or be escorted off campus. If consent is withdrawn a written report must be promptly made to the Superintendent-President or designee.

The person from whom consent has been withdrawn may submit a written request for a hearing on the withdrawal within the period of the withdrawal. The request shall be granted not later than ten (10) business days from the date of the receipt of the request. The hearing will be conducted in accordance with the provisions of this administrative procedure relating to interim suspensions.

Any person for whom consent to remain on campus has been withdrawn who knowingly reenters the campus during the period in which consent has been withdrawn, except to come for a meeting or hearing, is subject to arrest. (Penal Code Section 626.4)

No Contact Order - A written issuance that there should be no personal or interpersonal contact or communication between involved parties. This includes verbal and non-verbal.

Short-Term Suspension - Exclusion of the student by the Dean of Student Life/Student, Conduct Administrator or designee for good cause from one or more classes or from all activities of the College District for a period of up to ten (10) consecutive days of instruction.

The Dean of Student Life or designee's decision on a short-term suspension shall be final.

Long-Term Suspension - Exclusion of the student by the Dean of Student Life or designee for good cause from one or more classes or from all classes and activities of the College District for one or more terms, not to exceed two years.

Within ten (10) business days after the meeting described above, the Dean of Student Life/Student Conduct Administrator or designee shall decide whether to impose a long-term suspension. Written notice of the decision shall be provided to the student. The notice will include the right of the student to request a formal hearing before a long-term suspension is imposed, as well as a copy of this policy describing the procedures for a hearing. The student shall not be allowed on campus until the rendering of a decision by a Student Conduct Hearing Panel. Students may be permitted on campus to conduct student business, but must receive permission from the Office of Student Life prior to coming to campus and must check in with the College's Campus Police Department to obtain a police escort while on campus.

Immediate Interim Suspension (Education Code Section 66017) -

The Dean of Student Life/Student Conduct Administrator or designee may order immediate interim suspension of a student where he/she concludes the following:

- To ensure the safety and well-being of members of the College community or preservation of College property;
- To ensure the student's own physical or emotional safety and well-being;
- If the student poses an immediate threat or disruption of or interference with the normal operations of the College;
- Student has been accused of a severe violation and cannot be located and/or does not participate in the conduct process.

In cases where an interim suspension has been ordered, the time limits contained in this administrative procedure will not apply. All hearing rights, including the right to a formal hearing where a long-term suspension or expulsion is recommended, will be afforded to the student within ten (10) business days of the decision to impose an interim suspension.

Expulsion

Expulsion is the permanent separation of a student from the Pasadena Area Community College District by action of the Board of Trustees for good cause when other means of correction fail to bring about appropriate conduct, or when the presence of the student causes a continuing danger to the physical safety of the student or others. The student is prohibited from College property, functions, events and activities. Permanent notification will appear on student's Pasadena City College transcript.

Within ten (10) business days after meeting with the accused student above, the Dean of Student Life/Student Conduct Administrator shall decide whether to recommend expulsion to the Board of Trustees. Written notice of the Dean's or designee's decision shall be provided to the student. The notice will include the right of the student to request a formal hearing before expulsion is imposed, and a copy of this policy describing the procedures for a hearing.

HEARING PROCEDURES

Request for Hearing

Within five (5) business days after the receipt of the Dean of Student Life/Student Conduct Administrator or designee's decision regarding a long-term suspension or expulsion, the student may request a formal hearing of the Student Conduct Hearing Panel. The request must be made in writing to the Dean of Student Life or designee.

Schedule of Hearing

The formal hearing shall be held within fifteen (15) business days after a request for hearing of the Hearing Panel is received.

At least five (5) business days prior to the hearing date, the Dean of Student Life/Student Conduct Administrator or designee will inform the student of the hearing date and time by certified mail, e-mail to his/her PCC e-mail address, with delivery notification, and/or in person with signature verification of receipt. The notice will enclose a description of the procedures to be followed at the hearing.

The student and the College have a right to receive copies of all documents that are to be presented to the Student Conduct Hearing Panel as well as any witnesses who may provide statements.

The Hearing Chair shall provide the student copies of all documents and witnesses to be presented to the panel. The chair shall make such documents available to the student as soon as practical before the hearing but not less than 2 business days before the hearing.

If the student intends to present any documents or witnesses with contact information to the Student Conduct Hearing Panel he/she shall provide copies of the same to the Hearing Chair no less than 2 days before the hearing.

If a student who has been given notice does not appear for the hearing, the information in support of the alleged violation(s) will be presented and considered in the student's absence. A student will be considered absent 15 minutes after the time the hearing was scheduled to convene.

Hearing Panel

The Hearing Panel shall consist of the Vice President of Student Affairs or designee as the Hearing Chair, and one representative from each of the following groups, Academic Senate, Classified Senate, the Associated Students, and College Management and the Dean of Student Life or designee as an ex-officio member and a witness for the District.

An affirmative vote of three members of the Hearing Panel shall be required to determine responsibility and sanctions.

The Superintendent/President or designee, the president of the Academic Senate or designee, the Classified Senate or designee, College Management the Associated Students Organization (ASPCO) president or designee shall each, at the beginning of the academic year, establish a list of at least five (5) persons who will serve on the Student Conduct Hearing panels. The Superintendent/President or designee shall appoint the hearing panel from the names on these lists. However, no administrator, faculty or staff member, or student who has any personal involvement in the matter to be decided, who is a necessary witness, or who could not otherwise act in a neutral manner shall serve on a hearing panel.

Hearing Panel Chair

The decision of the hearing panel chair shall be final on all matters relating to the conduct of the hearing unless there is a majority vote by other members of the panel to the contrary.

CONDUCT OF THE HEARING

All hearings shall be held in closed session and are confidential; they are not open to the public.

- The members of the hearing panel shall be provided with a copy of the complaint(s) against the student and any written response provided by the student before the hearing begins.
- The facts supporting the accusation shall be presented by a college representative who shall be the Dean of Student Life/Student Conduct Administrator or designee.
- The college representative and the student may call witnesses and introduce oral and written testimony relevant to the issues of the matter.
- Formal rules of evidence shall not apply. The standard of proof for Student Conduct Hearings will be a preponderance of evidence.
- Unless the hearing panel determines to proceed otherwise, the College representative and the student shall each be permitted to make an opening statement. Thereafter, the College representative shall make the first presentation, followed by the student. The College representative may present rebuttal evidence after the student completes his or her evidence. The burden shall be on the College representative to prove by preponderance of evidence that the facts alleged are true.
- The student has the right to be assisted in the hearing by an advisor. The advisor may provide counsel or support to the student but is not permitted to speak to the panel or participate directly in the hearing. Advisors who do not observe this restriction can be removed from the hearing by the Hearing Chair.
- If the student is a minor, the student's parent(s) or legal guardian must accompany him/her to the hearing and may act on his/her behalf.
- Witnesses shall not be present at the hearing when not testifying.
- The student and the Dean of Student Life/Student Conduct Administrator may arrange for witnesses to present pertinent information to the Panel. Witnesses will provide information to and answer questions from the Panel. All questions and responses are to be directed to the Panel, preferably the Chair, not between witnesses, complainant and accused student.
- If either the complainant or accused student/respondent is unable to attend the hearing, his/her written statement will stand as his/her testimony.
- The student and his/her advisor, if any, will be allowed to attend the entire portion of the hearing at which information is received, excluding deliberations of responsibility or sanctioning.
- Should a student wish to have an attorney present to advise him/her, the student must notify the Dean of Student Life/Student Conduct Administrator not less than 5 days prior to the hearing that he/she intends to bring an attorney.
- In hearings involving more than one student in the same situation, the Dean of Student Life/Student Conduct Administrator may permit the hearings concerning each student to be conducted jointly.
- Supporting documentation, including pertinent records, exhibits and written statements may be accepted as information for consideration at the discretion of the Chair. Prior student conduct violations may be considered in a hearing and for determination of sanctions.
- Questions of whether potential information will be accepted will be resolved at the discretion of the Chair. All procedural questions are subject to the final decision of the Chair.
- The Panel will determine whether the student is responsible for violating each section of the Student Conduct Code which the student is accused of violating. The Panel's determination will be made on the basis of whether it is more likely than not (preponderance of evidence) that the student violated the Student Conduct Code. The Panel will then determine what sanctions it deems appropriate for such violations.
- Hearings (excluding deliberations) will be audio-recorded and made a part of the student's conduct file.
- The Chair will prepare a written report detailing the finding, the information cited by the Panel in support of its findings and any information the Panel excluded and why, concluding with any recommended sanctions. The Chair will forward this document to the Dean of Student Life/Student Conduct Administrator within 5 days upon conclusion of the hearing.
- In a matter in which the recommended sanction is expulsion from the College, the Chair will forward such report to the Vice President of Student Affairs for further consideration and possible action.

Special Provisions for Sexual Misconduct Violations

Sexual Misconduct includes but is not limited to:

- a. Sexual Harassment.
 - b. Non-consensual Sexual Contact (or attempts to commit the same)
 - c. Sexual Exploitation
- Other misconduct offenses when it is sex or gender-based:

- a. Threatening or causing physical harm, verbal abuse;
- b. Discrimination
- c. Intimidation
- d. Bullying
- e. Violence between those in intimate/dating relationships to each other;
- f. Stalking

The following procedures apply when the Title IX Officer, or the Dean of Student Life or designee have determined that sexual misconduct has occurred.

The person accused and found responsible of a sexual offense through a Pasadena City College investigation shall be subject to disciplinary action in accordance with established procedures, which procedures shall provide at minimum that:

- Accusers have the opportunity to request prompt proceedings. The complainant and the accused are entitled to the same opportunities to have a support person or advisor of their choice present during a campus student conduct proceeding; if the advisor is an attorney, notifications regarding attorney involvement apply.
- Both the complainant and the accused shall be informed simultaneously of the outcome of any campus student conduct proceeding brought alleging a sexual offense within five (5) business days following of the end of the proceedings.

Additionally:

- Complainants are to be notified when written notice of the allegation/hearing is delivered to the accused student.
- All parties to an allegation have a right not to face questions or discussion of their sexual history or character unless the Chair determines that such information is highly relevant to determining whether the policy has been violated.
- Evidence of a prior consensual dating or sexual relationship between the parties does not imply consent or preclude a finding of sexual misconduct.
- Each party has the right to be present for all testimony and questioning. However, if requested the Panel must make arrangements so that the complainant and accused are not in the same room at the same time.
- The College must not require a complainant to be present as a prerequisite for the hearing to proceed, or sanctions imposed.
- Neither party is allowed to cross-examine each other or witnesses. All questions must be submitted to the Hearing Chair.
- Both parties have the right to appeal the decision of the panel.

The hearing shall be recorded by the College District

by tape recording, and shall be the only recording made. No witness who refuses to be recorded may be permitted to give testimony. In the event the recording is by tape recording, the hearing panel chair shall, at the beginning of the hearing, ask each person present to identify themselves by name, and thereafter shall ask witnesses to identify themselves by name. Tape recording shall remain in the custody of the College District at all times, unless released to a professional transcribing service. The student may request a copy of the tape recording.

Notice of Decision

The Dean of Student Life shall provide the student written notice of the final resolution of charged violation(s). The written notice shall be sent to the student by certified mail, return receipt requested, or receipted-for personal delivery or via PCC e-mail with delivery notification, within (five) 5 business days of the written findings and decision of the Student Conduct Hearing Panel. In cases alleging gender-based or sexual misconduct, the complainant will also receive comparable notice of the relevant findings and sanctions.

The written notice to the student shall include:

- The specific provision of the Student Conduct Code that was violated;
- The sanction(s) imposed and the date(s) on or periods for which they are in effect;
- A statement of the student's right to appeal in writing to the Vice President of Student Affairs;
- A statement informing that the failure to file a request for such an appeal within the time provided shall be deemed a waiver of the right to an appeal.

APPEALS TO THE VICE PRESIDENT OF STUDENT SERVICES

A student may appeal the decision of the Student Conduct Hearing panel to the Vice President of Student Services only on the following grounds:

1. Proper procedures were not followed. Specific citations required.
2. There is new relevant evidence not reasonably available at the time of the hearing or the imposition of the sanction(s).
3. The evidence does not clearly support the finding(s).
4. The sanctions are inappropriate relative to the violation.

In cases alleging a violation of gender-based or sexual misconduct, both the accused student and the complainant have the right to appeal the findings of responsibility and/or sanctions based on the above criteria.

An appeal must be submitted in writing to the Vice President of Student Services within 5 days of receiving written notification of the hearing decision. The Vice Pres-

ident will review the appeal and the hearing findings and may make a decision to uphold, reverse, revise or modify the decision and sanctions imposed on the student.

The Vice President will notify the student in writing by certified mail, registered receipt, via e-mail within 10 business days following receipt of the request for appeal of his/her decision.

The decision of the Vice President of Student Services shall be final except in the case of expulsion.

PROCEDURES FOR EXPULSION

The Board of Trustees is authorized to expel a student for good cause when other means of correction fail to bring about proper conduct, or when the presence of the student causes a continuing danger to the physical safety of the student or others. The notice of expulsion will be sent to the student with copies to the student file, Dean of Student Life/Student Conduct Administrator, Vice President of Student Services, Director of Admissions & Records, the College President-Superintendent, and Campus Police.

In the event the Vice President has determined that he/she will seek a student's expulsion, the following procedures will follow:

Recommendation for Expulsion: If the Vice President of Student Services determines that the student should be expelled, he/she shall deliver a written recommendation for the student's expulsion to the President. A copy of the Vice President of Student Services' recommendation shall be provided to the student or if the student is a minor to his/her parent or guardian. The Vice President's recommendation for expulsion shall contain a statement of the charges against the student that provide the basis for his/her request that the student be expelled, including a factual description of the conduct upon which the charges are based, the action(s) taken by the Dean of Student Life/Student Conduct Administrator and the recommendation of the Student Conduct Hearing Panel.

The Board of Trustees shall consider any recommendation from the Superintendent-President for expulsion at the next regularly scheduled meeting of the Board after receipt of the recommended decision.

The Board shall consider any expulsion recommendation in closed session, unless the student has requested that the matter be considered in a public meeting in accordance with these procedures (Education Code Section 72122).

The student shall be notified in writing, via PCC e-mail, by registered or certified mail or by personal service, at least five (5) days prior to the Board meeting, of the date, time, and place of the Board of Trustees' meeting. The student may, within forty-eight hours (48) after receipt of the notice, request that the hearing portion regarding the expulsion be held as a public meeting. Even if a student has requested that the Board consider an expulsion

recommendation in a public meeting, the Board will hold any discussion that might be in conflict with the right to privacy of any student or employee other than the student requesting the public meeting in a closed session.

The Board may accept, modify or reject the findings, decisions and recommendations of the Superintendent-President and/or the hearing panel. If the Board modifies or rejects the decision, the Board shall review the record of the hearing, and shall prepare a new written decision which contains specific factual findings and conclusions. The decision of the Board shall be final. The final action of the Board on the expulsion shall be taken at a public meeting, and the result of the action shall be a public record of the District.

The Superintendent-President or designee shall notify the student in writing within five (5) business days of the of the Board of Trustees' decision. The decision of the Board of Trustees shall be final.

GENERAL PROVISIONS

Failure of Student to Participate - Student conduct procedures under this administrative procedure may proceed or continue notwithstanding the failure or refusal of a student to respond, attend, or otherwise participate, after having been properly notified of the proceeding.

Technical Departures From This Procedure - Technical departures from this administrative procedure shall not be grounds to void the District's right to take disciplinary action against a student; unless the technical departure or error prevented a fair determination of the issue.

Time Limits - Any times specified in this administrative procedure may be shortened or lengthened if there is mutual concurrence by all parties.

PASADENA CITY COLLEGE
CATALOG
2019-2020

Transfer Information



SECTION IV

TRANSFER INFORMATION

Counseling and Career Services

Students are encouraged to meet with a counselor in order to develop and refine educational plans and career goals. PCC counselors are highly trained and experienced professionals who are also well-informed in many fields of study and who work closely with PCC instructional divisions in order to provide students with current information about course offerings, curriculum changes, and transfer requirements. Each counselor is well-equipped to assist students in planning transfer-related coursework.

In addition to serving students in the Counseling Center, the counseling faculty offers a number of counseling courses as part of the College's curriculum. These courses include skill-building activities to enhance program planning, personal and professional development, study and time management skills, and strategies for problem-solving and decision making.

The Counseling and Career Services office is located in room L-104 of the Student Services Center.

The Transfer Center

The Pasadena City College Transfer Center has resources and services to make the transition from PCC to a four-year college or university easier. Representatives from many public and private universities, including UCLA, USC, CSU Los Angeles, Cal Poly Pomona, CSU Northridge, and UC Riverside meet regularly with prospective students to advise them regarding admissions, program planning, and other support services. The Transfer Center also contains resources in text, software, and videotape for student use in planning transfer programs.

Several transfer-related workshops as well as regularly scheduled orientations are offered throughout the year to assist and inform students about transfer issues and application procedures. Presentations on selected topics critical to the transfer process are conducted by personnel from four-year institutions and PCC staff regularly, during both day and evening hours. Topics covered include how to select a college, university admission requirements, common transfer terms, and other areas critical to the transfer process. The Transfer Center also hosts transfer information

fairs on the PCC campus and provides frequent university campus tours, which give students an opportunity to meet with college and university admissions representatives.

For additional information on these and other transfer-related activities, visit the Transfer Center, located in L110, in the PCC Student Services Center.

ASSIST (www.assist.org)

Project ASSIST (Articulation System Stimulating Inter-institutional Student Transfer) is a Web-based articulation and transfer planning system that provides a wide variety of information about California's public institutions of higher education. ASSIST addresses student concerns about transferring between institutions by providing specific information that indicates which PCC courses are transferable and how they can be applied at any number of CSU and UC campuses. In many instances, ASSIST also offers current major-specific information which may be helpful to students planning lower-division coursework for transfer into specific majors at a CSU or UC campus. ASSIST also provides access to system-wide general education patterns such as the IGETC (Intersegmental General Education Transfer Curriculum) and the CSU General Education Course List, as well as general education patterns for selected CSU and UC campuses. Because Assist.org is considered the official repository of articulation information, it may be considered the primary source of articulation information; all other sources should be consistent with the information on Assist.

The Internet address for the ASSIST website is www.assist.org. Students may access this website in the PCC Transfer Center, or they may retrieve ASSIST information by meeting with a counselor.

TRANSFER VOCABULARY

Articulation Agreements – Guides to equivalency between PCC courses and those at many CSU, UC, and California independent colleges and universities.

Basic Skills Courses, Precollegiate – Courses numbered in the 400s, 300s, 200s or 100s designed as preparation for college-level work. PCC offers these courses in reading,

writing, English as a second language, other English skills, and mathematics.

IGETC or CSU GE Certification – The process in which four-year institutions recognize the general education courses taught at California community colleges as meeting particular general education (GE) requirements.

C-ID – The Course Identification Numbering System. C-ID is a supranumber that identifies a lower-division, transferable course commonly articulated between the California Community Colleges and universities (including Universities of California, the California State Universities, as well as with many of California's independent colleges and universities). The C-ID number means that any other course elsewhere, bearing the same number, will be accepted by the institution.

Corequisite – A course in which a student is required to enroll at the same time that he or she is enrolled in another course. In the corequisite course, the student acquires certain skills, concepts and/or information which are essential to success in the concurrent course.

Elective – A course which is not specifically required for a major, but which may be taken by choice for unit credit.

General Education (GE) Requirements – A specific group of courses taken outside of a student's major to meet the need for broad knowledge of the world and to satisfy either PCC degree requirements or requirements for transfer to UC, CSU, or an independent college or university.

Grade-Point Average (GPA) – The GPA is on a 4-point scale and is computed by dividing the total grade points earned by the number of units attempted. For example, if the number of grade points earned is 28 and the number of units attempted is 14, then the GPA would be 2.0.

High-Unit Majors – High-unit majors are those areas of study that place more emphasis on preparatory courses within the major rather than the completion of general education courses. Usually these are majors in the physical and life sciences and engineering. Examples of these majors include: biology, chemistry, physics, geology, mechanical engineering, civil engineering, computer science, mathematics, and many others.

Students who choose a high-unit major should place their primary focus on completion of courses in mathematics and the appropriate science courses. General education courses based on the Intersegmental General Education Transfer Curriculum (IGETC) should be completed as they can be fitted into one's schedule. It is not necessary to

complete all GE courses prior to transfer, but upon transfer it will be required that a student complete the general education requirements of the particular school where they have been accepted.

Impacted Major or Program – An impacted major or program at a four-year college or university is one where more applications are received from students than the campus can enroll. As a result, sometimes those high-demand majors or programs may have additional admission or selection criteria. See a counselor for additional information.

Independent Institutions – Private colleges and universities such as USC or Art Center, as opposed to public institutions such as CSUs or UCs.

Prerequisite – A condition of enrollment, such as satisfactory completion of another course (defined as a grade of A, B, C, or "P" (Pass) that must be met before a student can register for a course or educational program. By meeting the prerequisite, the student demonstrates readiness for that course or program.

Recommended Preparation – A Recommended Preparation statement in a course description means that a student is advised, but not required, to complete the identified course(s) prior to enrollment in another course or educational program.

TAG – Transfer Admission Guarantee agreement. These are an alternative to completing the normal transfer pattern. Various CSU and UC schools provide plans whereby a student agrees to complete a specific set of courses and a minimum grade point average with the provision that he/she will be accepted to a particular school upon successful completion of the plan. Information about TAGs is available in the Transfer Center and in the Counseling Division.

Transferable Course – A course accepted for credit toward a bachelor's degree at a four-year institution.

- **CSU Transferable** courses are baccalaureate level and will transfer for credit to all CSU campuses. Courses are designated in the catalog and schedule of classes as *Transfer Credit: CSU*. The units may also count toward the AS, AA, and AD-T degrees at PCC.

- **UC Transferable** courses are baccalaureate level and will transfer for credit to all UC and CSU campuses. Courses are designated in the catalog and schedule of classes as *Transfer Credit: CSU/UC*. The units may also count toward the AS, AA, and AD-T degrees at PCC.

Transcript – The official historical record of a student's high school or college work.

UC Credit Limitation – UC limits credit for some transferable courses. Students contemplating transfer to a UC campus should consult with a PCC Counselor, and/or view PCC's list of UC transferable courses at www.assist.org. Find Pasadena City College. Find UC transferable courses.

UC Transfer Paths – If you're unsure which UC campus you will attend, or if you want to prepare for as many UC campuses as possible, the UC Statewide Transfer Preparation Paths will help you identify coursework that will prepare you for multiple UC campuses. These "paths" summarize the requirements and major preparation coursework at each UC campus for similar majors, and highlight the common requirements shared by a majority of UC campuses. The **UC Statewide Transfer Preparation Paths** provides information about Transfer Admission Eligibility, general education, what's generally required for a UC degree, and becoming a competitive applicant. Information can be accessed at: <http://admission.universityofcalifornia.edu/transfer/preparation-paths/index.html>

Undergraduate, Lower Division – Up to 59 semester units towards completing general education requirements and introductory courses for an academic major. Lower division courses are usually taken during the first and second years of study at a university.

Undergraduate, Upper Division – 60 or more semester units with concentration in an academic major. Upper division courses are usually taken during the third and fourth years of study at a university.

Unit – The amount of college credit given for a course based upon the number of hours the course meets weekly. One (1) unit represents one hour per week of actual class time in a lecture or discussion section.

TRANSFER-RELATED WEBSITES

The following websites provide links with many college and university home pages:

California Colleges

<http://www.californiacolleges.edu>

The University of California

<http://admission.universityofcalifornia.edu>

The California State University

<http://www.calstate.edu>

The Association of Independent California Colleges and Universities (AICCU)

<http://www.aiccu.edu>

Historically Black Colleges, Hispanic Serving Institutions, and Tribal Colleges

Historically Black Colleges:

<http://extranet.cccco.edu/HBCUTransfer.aspx>

Hispanic Serving Institutions:

http://www.hacu.net/hacu/US_Members.asp

American Indian Higher Education Consortium:

<http://www.aihec.org/>

Princeton Review's College Service

<http://www.princetonreview.com>

US News & World Report College Rankings

<http://www.usnews.com/education>

SPECIFIC TRANSFER INFORMATION FOR EDUCATION AND PREPROFESSIONAL PROGRAMS

EDUCATION

(TEACHER PREPARATION PROGRAMS)

The Federal No Child Left Behind Act (NCLB) of 2001 contains specific teacher requirements that must be met by all public school teachers who teach "core" academic subjects. All teachers must meet the Highly Qualified Teacher (HQT) requirement. The State of California, in compliance with the federal mandate, revised the requirements to teach in California.

ELEMENTARY SCHOOL EDUCATION

Currently, students who wish to teach may choose from two options. The first option is a five-year traditional program leading to a Preliminary Multiple Subject Teaching Credential or Preliminary Education Specialist Credential after the baccalaureate degree. In the second option, students may find it possible to complete the requirements for the bachelor's degree and preliminary credential in a standard four-year, full-time college program and may be employed after graduation. These programs are referred to as Blended or Integrated Teacher Education Programs (ITEP) and are available at several universities and colleges. These types of programs provide avenues for students to complete their baccalaureate degree and receive a Preliminary Multiple Subject Teaching Credential or Preliminary Education Specialist Credential at the same time. One such program is "Urban Learning" at CSU Los Angeles. Students will complete their professional education courses AND

student teaching while completing their bachelor's degree. Attainment of one of the preliminary credentials and successful passing of State-mandated standardized tests allows for immediate employment as a classroom teacher after graduation. The most common majors for students interested in pursuing elementary school teaching are Child Development and Liberal Studies. However, a Bachelor's degree, in any undergraduate degree, as well as passing State-mandated tests, will allow a student to be eligible to enter a teaching credential program.

Currently, PCC prepares students for transfer to Cal State Los Angeles (Major areas: Child Development, Liberal Studies, Mexican American Studies and Urban Learning); Cal State Fullerton (Liberal Studies and Child and Adolescent Development); Cal State Northridge (Liberal Studies and Child and Adolescent Development); Cal Poly Pomona (Liberal Studies and Gender, Ethnicity and Multicultural Studies – GEMS and Early Childhood Studies; University of California, Riverside (Liberal Studies); Mount St. Mary's College (Liberal Studies); Pacific Oaks College (Human Development and Early Childhood Education); and University of La Verne (Liberal Studies). Additionally, some of these same campuses also offer Child Development majors and other CSU and independent colleges and universities offer majors in both Child Development and Liberal Studies.

MIDDLE SCHOOL AND HIGH SCHOOL EDUCATION

For teaching at the high school level, a Single Subject Teaching Credential and a B.A. degree with subject matter preparation in the subject is required. After transfer, students will be informed by the college or university as to whether they will be required to take the Single Subject CSET (California Subject Examination for Teachers) test or whether their subject matter preparation can be met by their major coursework in order to be eligible for the teaching credential program. Typically, students major in the discipline they will teach and progress to the Single Subject Credential Program after the completion of a baccalaureate degree. For example, students wishing to teach high school English, usually major in English. There are however a few programs where the process of starting the Single Subject Teaching Credential begins prior to completing the baccalaureate degree. This is often in the areas of Science, Mathematics or English. For example, UC Riverside has an Integrated Program with a major in Mathematics.

Specific program and major course requirements for the various colleges/universities are available on the Pasadena City College Transfer Requirements Tool: <http://pasadena.edu/academics/transfer-center/transfer-tool.php>, ASSIST: <http://assist.org>, or visit the Social Sciences Division in C321 or Counseling and Career Services in L104.

I TEACHING CREDENTIALS

Multiple Subject: For instruction in multiple subjects as commonly taught in California elementary schools. The Multiple Subject Teaching Credential authorizes its holder to teach all areas of curriculum for grades K – 8 in a self-contained classroom.

Middle (Junior) School Teaching with a Multiple Subject Credential: Some students decide to teach at the middle school level after earning a B.A. degree in, for example, Liberal Studies and then pursue a Multiple Subjects Teaching Credential. In order to teach at the middle school level, a student must meet the NCLB Highly Qualified Teacher (HQT) requirements in the area they wish to teach. To meet the HQT requirements a student must: a) complete subject matter preparation in the major area of 32 units (which is considered to be equivalent to a B.A. degree); and b) pass the CSET (California Subject Examination for Teachers) exam to establish subject matter competency. If a student has earned units in a concentration/ depth area of the Liberal Studies major which is one that is taught in the middle school, such as mathematics, English, Government, etc., the additional units in the area may not be as many as 32 because subject matter and major prerequisites may have already been earned prior to the B.A. degree. A student wishing to teach Middle School is generally encouraged to pursue a Single Subject Credential in order to meet the requirement for being highly qualified in their respective discipline.

Middle and High School with a Single Subject Credential: The Single Subject Credential authorizes its holder to teach the subject for which they have qualified. It is for instruction in a single subject as commonly taught in California junior (middle) and senior high schools. Areas for single "core" subjects of instruction (per NCLB) are: Arts, Foreign Languages, English, Reading and Language Arts, Mathematics, Sciences, and Social Sciences, which include History, Geography, Economics, and Government. Other majors leading to attainment of a Single Subject Credential may include: Physical Education, Industrial Arts, Home Economics, and Agriculture. Caution is advised for students who choose a general major in Social Sciences, to assure that the major has State approval and fulfills the "Highly Qualified" mandate of the federal government.

Education Specialist Credential: For instruction in one of the following areas: communication handicapped, mild/moderate disabilities, moderate/

severe disabilities, physically handicapped, visually handicapped.

The following excerpt is taken from: Education Specialist Credential/State of California Commission on Teacher Credentialing Authorization State of California Commission on Teacher Credentialing 1900 Capitol Avenue Sacramento, CA 95811-4213 Email: credentials@ctc.ca.gov Website: www.ctc.ca.gov

College and University Level: At the college/university level a teaching credential is not issued by the State. A minimum of a Master's degree is necessary in the subject matter to be taught. A Ph.D. is usually required for teaching at the university level.

EDUCATION SPECIALIST INSTRUCTION CREDENTIAL

Requirements for Teachers Prepared in California for the Preliminary and Clear Credentials

The Commission issues a two-level special education teaching credential. Regulations approved in 2010 established two new levels for candidates completing the program standards approved in 2008 and 2009. The new levels will be 'preliminary' and 'clear'. A Preliminary Education Specialist Instruction Credential is the first document issued after an individual has met basic credential requirements. The Clear credential is issued once all credential requirements have been completed.

Authorization (see Terms and Definitions)

The Education Specialist Instruction Credential authorizes the holder to conduct Educational Assessments related to student's access to the academic core curriculum and progress towards meeting instructional academic goals, provide instruction, and Special Education Support to individuals in the area of specialization listed on the credential in the following settings:

- Resource rooms or services
- Special education settings
- General education settings
- Special schools
- Home/hospital settings
- State hospitals
- Development centers
- Correctional facilities
- Non-public, non-sectarian schools and agencies
- Alternative and non-traditional instructional public school settings other than classroom

Autism Spectrum Disorders

Autism Spectrum Disorders (ASD) content is included in the new preliminary Education Specialist Instruction Teaching Credential programs for all specialty areas. The preliminary and clear credential authorizes the holder to provide autism instructional services to students within the specialty area(s) of their credential. The ASD authorization appears as a separate authorization on the Education Specialist Instruction Credential.

Teaching English Learners

The Education Specialist Preliminary Teacher Preparation Program includes content for teaching English learners that authorizes the credential holder to provide instruction for English language development and specially designed academic instruction in English within the subject area and grade level authorization of the Education Specialist Instruction Teaching Credential.

Specialty Areas

• Mild/Moderate Disabilities (M/M)

Includes specific learning disabilities; mild to moderate intellectual disabilities; other health impairments; serious emotional disturbance; and authorizes service in grades K-12 and in classes organized primarily for adults through age 22.

• Moderate/Severe Disabilities (M/S)

Includes autism; deaf-blindness; moderate to severe intellectual disabilities; multiple disabilities; serious emotional disturbance; and authorizes service in grades K-12 and in classes organized primarily for adults through age 22.

• Deaf and Hard of Hearing (DHH)

Includes deafness; hearing impairment; deaf-blindness; and authorizes service to individuals ages birth through 22.

• Visual Impairments (VI)

Includes blindness; visual impairment; deaf-blindness; and authorizes service to individuals ages birth through 22.

• Physical and Health Impairments (PHI)

Includes orthopedic impairment; other health impairment; multiple disabilities; traumatic brain injury; and authorizes service to individuals ages birth through 22.

• Early Childhood Special Education (ECSE)

Includes the mild/moderate and moderate/severe

disabilities listed above and traumatic brain injury; authorizes service to children ages birth to pre-kindergarten only.

- **Language and Academic Development (LAD)**

Authorizes the holder to provide instructional services to students with academic communication and language needs to children in preschool, kindergarten, in grades 1 - 12 through age 22, and classes organized primarily for adults, but does not take the place of speech and language services as defined in Education Code section 56333.

An added authorization in Early Childhood Special Education is also available to individuals who hold a preliminary, Level I, professional clear, clear, Level II, or life special education teaching credential, and who complete a program through a Commission-approved program sponsor.

The ECSE Added Authorization authorizes the holder to provide special education services in the area of mild/moderate or moderate/severe disabilities for students ages birth to pre-K as determined by the local level special education assessment.

ATTAINMENT OF CREDENTIALS REQUIRES:

To be eligible to apply to a teaching credential program, a student must have a 2.75 G.P.A. in the last 90 units of their coursework and receive a passing score on California Basic Education Skills Test (CBEST) and a passing score on – or in some instances attempting – the appropriate **California Subject Examination for Teachers (Multiple Subject CSET or Single Subject CSET, dependent upon credential program).**

1. A baccalaureate degree in a federal/State approved major (other than education) from an approved institution.
2. Completion of subject matter-preparation and a program of professional education including student teaching.
3. Passage of the State mandated standardized examinations with some exceptions.

For more information regarding specific requirements for the teaching and administrative credentials, please go to <https://www.ctc.ca.gov> and/or PCC Hixon Teacher Preparation Programs office in CDC 219 or the Social Sciences Division Office in C-321.

II SERVICES CREDENTIAL

The State of California provides for five categories of non-teaching credentials, which authorize their holders to provide specific non-classroom services to public schools. All require advanced preparation after the baccalaureate degree. Service credentials are issued in:

1. Counseling Services
2. Psychological Services
3. Social Work Services
4. Administrative Services
5. Health Services (School Nurse)
6. Library Services
7. Clinical-Rehabilitative Services (primarily speech and hearing therapists and audiologists, orientation and mobility specialists)

The following excerpt is taken from: Services Credentials/State of California Commission on Teacher Credentialing Authorization State of California Commission on Teacher Credentialing 1900 Capitol Avenue Sacramento, CA 95811-4213 Email: credentials@ctc.ca.gov Website: www.ctc.ca.gov

SPEECH-LANGUAGE PATHOLOGY SERVICES CREDENTIAL

California has a two-tier structure for this credential that consists of a sequence of requirements, which the holder is given up to two years to complete. The two-year preliminary credential is the first document issued after an individual meets the specific credential requirements. Individuals receiving the preliminary credential are making a commitment to complete the process and obtain the clear credential. The clear credential is issued once all credential requirements have been completed. If requirements for the clear credential are not completed before the expiration of the preliminary, the holder will be unable to serve in California's public schools with that credential until those requirements are met and the document renewed.

Authorization

The Speech-Language Pathology Services Credential may be issued in any of the following areas:

- Language, Speech and Hearing
- Language, Speech and Hearing and Audiology
- Language, Speech and Hearing including Special Class Authorization
- Language, Speech and Hearing and Audiology including Special Class Authorization

The Speech-Language Pathology Services Credential in Language, Speech and Hearing authorizes the holder to conduct Language, Speech, and Hearing Assessments and provide Educational Services, provide specific learning disability area services related to speech and language, and special education services to individuals with language and speech impairments across the special education disability areas, to students from birth through age 22 in services across the continuum of program options available found in California Code of Regulations Title 5 Section 80048.9.3 (see Terms and Definitions).

Special Class Authorization

The Special Class Authorization (SCA) is a teaching authorization that may be added to a credential that authorizes providing speech services. The SCA authorizes the holder to provide instructional services to special need students in the area of autism and speech and language impairment who are identified through the local level special education assessment, and to conduct Educational Assessments related to students' access to the academic core curriculum and Special Education Support (see Terms and Definitions).

Since the SCA is a teaching authorization, requirements have been updated to include satisfying subject-matter competence, reading, and English learner requirements to align with other special education teaching authorizations on the Education Specialist Teaching Credential as well as No Child Left Behind compliance. While many Commission-approved programs and employers currently require individuals to meet the updated requirements, individuals will be held to complete these requirements to earn the SCA effective issuance date July 1, 2012.

III PUPIL PERSONNEL SERVICES CREDENTIAL FOR INDIVIDUALS PREPARED IN CALIFORNIA

The Pupil Personnel Services Credential authorizes any of the following four specializations: school counseling, school social work, school psychology, and school child welfare and attendance services. The authorization and requirements for each specialization are listed below.

SCHOOL COUNSELING

The specialization in School Counseling authorizes the holder to perform the following duties:

- Develop, plan, implement, and evaluate a school counseling and guidance program that includes academic, career, personal, and social development

- Advocate for the high academic achievement and social development of all students
- Provide schoolwide prevention and intervention strategies and counseling services
- Provide consultation, training, and staff development to teachers and parents regarding students' needs
- Supervise a district-approved advisory program as described in California Education Code, Section 49600

SCHOOL SOCIAL WORK

The specialization in School Social Work authorizes the holder to perform the following duties:

- Assess home, school, personal, and community factors that may affect a student's learning
- Identify and provide intervention strategies for children and their families, including counseling, case management, and crisis intervention
- Consult with teachers, administrators, and other school staff regarding social and emotional needs of students
- Coordinate family, school, and community resources on behalf of students

SCHOOL PSYCHOLOGY

The specialization in School Psychology authorizes the holder to perform the following duties:

- Provide services that enhance academic performance
- Design strategies and programs to address problems of adjustment
- Consult with other educators and parents on issues of social development and behavioral and academic difficulties
- Conduct psycho-educational assessment for purposes of identifying special needs
- Provide psychological counseling for individuals, groups, and families
- Coordinate intervention strategies for management of individuals and schoolwide crises

CHILD WELFARE AND ATTENDANCE

The specialization in Child Welfare and Attendance authorizes the holder to perform the following duties:

- Access appropriate services from both public and private providers, including law enforcement and social services
- Provide staff development to school personnel regarding state and federal laws pertaining to

due process and child welfare and attendance laws

- Address school policies and procedures that inhibit academic success
- Implement strategies to improve student attendance
- Participate in schoolwide reform efforts
- Promote understanding and appreciation of those factors that affect the attendance of culturally-diverse student populations

IV ADMINISTRATIVE SERVICES CREDENTIAL FOR INDIVIDUALS PREPARED IN CALIFORNIA

California has a two-tier credential structure. A five-year preliminary credential is the first credential issued after an individual meets basic credential requirements. A clear credential is issued when all credential requirements have been completed.

The Administrative Services Credential authorizes the holder to provide the following services in grades 12 and below, including preschool, and in classes organized primarily for adults:

- Develop, coordinate, and assess instructional programs
- Evaluate certificated and classified personnel
- Provide students' discipline, including but not limited to, suspension and expulsion
- Provide certificated and classified employees discipline, including but not limited to, suspension, dismissal, and reinstatement
- Supervise certificated and classified personnel
- Manage school site, district, or county level fiscal services
- Recruit, employ, and assign certificated and classified personnel
- Develop, coordinate, and supervise student support services, including but not limited to extracurricular activities, pupil personnel services, health services, library services, and technology support services

NOTE: A teaching credential may not be earned at a community college but may be attained at both public and independent colleges and universities. Current information may be obtained at the Teacher Preparation Office (C350) or at California Commission on Teacher Credentialing: <http://www.ctc.ca.gov>

PRE-PROFESSIONAL PROGRAMS:

The information below is intended to provide a general list of courses that are required by most graduate level/professional programs. Requirements can vary from school to school. Students are urged to contact the specific schools they are considering for up-to-date information. This list of classes should be combined with requirements for general education and major requirements to achieve a Bachelor's degree prior to entry to a professional program. Students are advised to meet with a counselor in L104 to make an education plan that will insure coverage of all essential areas of study.

Pre-Chiropractic
Pre-Dentistry
Pre-Law
Pre-Medicine
Pre-Optometry
Pre-Pharmacy
Pre-Physical Therapy
Pre-Physician Assistant
Pre-Veterinary Medicine

The general information provided here reflects those courses that may be completed at Pasadena City College in preparation for these fields of study.

CHIROPRACTIC (pre-chiropractic classes)

Chiropractic is a distinct profession in the field of health based on the principle of neurogenic control of physiological processes. The educational program is designed to instruct students in nutritional, manipulative, psychological and allied approaches to healing. Preparation for the major generally includes such coursework as biology, chemistry, anatomy, physics, psychology, and English composition.

Lower-division requirements may vary among colleges of chiropractic. In Southern California there is one chiropractic school: Southern California University of Health Sciences. For more specific details, students should see a counselor in order to plan a program to complete the necessary coursework before transfer. Students should also visit: www.scuhs.edu or www.NaturalHealers.com

Pre-Chiropractic courses at PCC typically include the following:

Anatomy 025 & Physiology 001
Biology 010A, 010B, 010C
Chemistry 001A, 001B, 008A, 008B
English 001A or 001AH
Physics 031A, 031B (or 002A, 002B or 001A, 001B, 001C)
Psychology 001 or 001H

DENTISTRY (pre-dental classes)

There are six dental schools in California: the University of California, Los Angeles; the University of California, San Francisco; the University of Southern California, Loma Linda University, University of the Pacific, and Western University of Health Sciences. Dentistry requires excellent scholastic ability and a high degree of manipulative skill. Except in unusual cases, three or four years of pre-dental work are required, making dentistry a seven- or eight-year program. Lower-division requirements for the major may differ widely among four-year colleges and universities. For more specific details, students should plan to meet with a counselor to plan transfer coursework, and should also visit the following website: www.adea.org or www.ada.org

Pre-Dental courses at PCC typically include the following:

Biology 010A, 010B, 010C
Chemistry 001A, 001B, 008A, 008B
Math requirements will vary from school to school
Physics 031A, 031B (or 002A, 002B or 001A, 001B, 001C)
Recommended: Art 032A; Art 038A

LAW (pre-law classes)

The majority of law schools require a bachelor's degree prior to entry. However, there is no set of specific pre-law courses. Law school admission personnel commonly ask pre-law students to choose a major in which a student will develop writing and critical thinking skills. Therefore, many pre-law students choose to finish a bachelor's degree in fields like political science, history, philosophy, and English. However, a student may pursue a degree in business, psychology, biology, or any major that he or she believes is best in terms of preparation for future study and life-long goals. For more information, students may wish to visit: www.americanbar.org, or stu.findlaw.com

Pre-Law courses at PCC typically include the following:

English 001C, 001CH
Philosophy 003, 007, 025, 030, 033
Physical Science 002

MEDICINE (pre-med classes)

There are more than ten medical schools in California: The Universities of California at Davis, Irvine, Los Angeles, Riverside, San Diego, and San Francisco; the University of Southern California; Loma Linda University; Stanford University; the Western University of the Health Sciences, and Touro University. The study of medicine requires excellent

scholastic ability and good human interaction and communication skills. Except in unusual cases, four years of pre-med work are required, making medicine an eight-year program. Preparatory classes for this field of study may differ among medical schools. For more specific details, students should plan to meet with a counselor to plan transfer coursework, and should also visit the following websites: www.aamc.org/amcas, www.aacom.org, www.aamc.org/mcatprep, or www.amsa.org.

Pre-Med courses at PCC typically include the following:

Biology 010A, 010B, 010C
Chemistry 001A, 001B, 008A, 008B
Physics 031A, 031B (or 002A, 002B or 001A, 001B, 001C)
Math requirement will vary from school to school
Recommended for MCAT beginning in 2015:
Psychology 001 or 001H, Sociology 001

OPTOMETRY (pre-optometry classes)

Optometry curricula are four years in duration and require three to four years of preparatory college work, much of which may be completed at Pasadena City College. There are three schools in California: the University of California, Berkeley; the Southern California College of Optometry; and Western University of Health Sciences. Many students interested in pursuing optometry receive undergraduate degrees in such majors as biological sciences prior to admission. For more information, students should meet with a counselor to plan transfer coursework, and should also visit the following websites: www.opted.org or www.aaopt.org.

Pre-Optometry courses at PCC typically include the following:

Anatomy 025 & Physiology 001
Biology 010A, 010B, 010C
Chemistry 001A, 001B, 008A, 008B
English 001A or 001AH, and English 001B or 001BH
Physics 031A, 031B (or 002A, 002B or 001A, 001B, 001C)
Mathematics 005A
Microbiology 002
Psychology 001 or 001H
Statistics 018, or 050

PHARMACY (pre-pharm classes)

There are eleven schools of Pharmacy in California: the University of California, San Francisco; the University of California, San Diego; the University of the Pacific; the University of Southern California; Western University of

Health Sciences; Touro University; Loma Linda University; Chapman University; Keck Graduate Institute; West Coast University; and California Northstate University. As of December 2018, two schools in candidate status include California Health Sciences University (Clovis), and Marshall B. Ketchum University (Fullerton). Pharmacy curricula are four years in duration and require three to four years of preparatory college work that may be completed at Pasadena City College. Lower-division requirements for the major may vary among these colleges and universities. For more specific details, students should see a counselor and visit www.aacp.org, www.pharmacas.org, or www.pharmacy.ca.gov, or www.pcatweb.info

Pre-Pharmacy courses at PCC typically include the following:

Anatomy 025 & Physiology 001
 Biology 010A, 010B, 010C
 Chemistry 001A, 001B, 008A, 008B
 Economics 001A, 001B
 English 001A or 001AH, 001B or 001BH
 Mathematics 005A
 Microbiology 002
 Physics 031A, 031B (or 002A, 002B or 001A, 001B, 001C)
 Psychology 001 or 001H
 Speech 001 or 010

PHYSICAL THERAPY (pre-physical therapy classes)

Physical Therapy is the treatment of disease or injury by the use of physical means such as heat, cold, sunlight, water, electricity, massage, and exercise. Physical therapists help people overcome or adjust to disabilities caused by illness, injury, or birth defects. They also plan and administer treatments, on referral by physicians.

Physical therapy programs are master's and doctoral degree programs. Entrance requirements are highly competitive and vary widely among schools. Generally, a bachelor's degree in any field is required for admission. Physical therapy schools in California approved by the American Physical Therapy Association include Azusa Pacific University; Chapman University; Loma Linda University; the University of Southern California; the University of the Pacific; Western University of Health Sciences; West Coast University; University of St. Augustine for Health Sciences; Samuel Merritt University; Mount Saint Mary's University; the University of California, San Francisco; and California State Universities at Fresno, Long Beach, Northridge, Sacramento, and San Diego. For more specific details, student should see a counselor and visit www.apta.org.

Pre-Physical Therapy courses at PCC typically include the following:

Anatomy 025 & Physiology 001
 Biology 010A, 010B, 010C
 Chemistry 001A, 001B (or 002A, 002B)
 Computer Information Systems 001 or 010
 Economics 001A or 001B
 Mathematics 003, 008, 009, or 005A
 Microbiology 002
 Physics 031A, 031B (or 002A, 002B or 001A, 001B, 001C)
 Psychology 001 or 001H, 024
 Speech 001 or 010
 Statistics 018 or 050

PHYSICIAN ASSISTANT (pre-PA classes)

There are 6 fully accredited physician assistant programs in California: the University of California, Davis; Stanford University; the University of Southern California; Western University of Health Sciences; Samuel Merritt College; and Touro University. Most of these programs are master's degree programs; others offer bachelor or associate degrees. A physician assistant is a skilled health care professional who, under the supervision of a physician, performs a variety of medical, diagnostic, and therapeutic services. A bachelor's degree or higher is recommended but not required to practice in this profession. Physician Assistants must pass preadmission competency tests in the sciences as well as the National Certifying Examination. A grade of C or better is required in all prerequisite courses. Lower-division requirements for the major may differ widely among four-year colleges and universities. For more specific details, students should see a counselor and visit www.aapa.org, www.caspaonline.org, or www.paeaonline.org.

Pre-Physician Assistant courses at PCC typically include the following:

Anatomy 025 & Physiology 001
 Biology 010A, 010B, 010C
 Chemistry 001A, 001B (or 002A & 002B)
 English 001A or 001AH, and English 001B or 001BH
 Mathematics 003, 008, 009, or 005A
 Microbiology 002
 Anthropology 002 or 002H
 Psychology 001 or 001H
 Sociology 001

VETERINARY MEDICINE

(pre-veterinary classes)

This profession offers opportunities in private practice, government service, state or municipal service, teaching and commercial work, such as production and testing of vaccines and serums. Veterinary medicine or science deals with prevention, control, care, and treatment of disease of domesticated animals and poultry, and supply and control of food and other products derived from them for human use. State laws regulate the practice of veterinary medicine and must be complied with before veterinarians can legally practice. An undergraduate major should be selected on the basis of individual interest and aptitude; there is no advantage gained toward admission by selecting one major over another. Experience with animals is considered an important part of the professional training. There are two veterinary medicine programs in California: the University of California, Davis and Western University of the Health Sciences. Candidates must complete the equivalent of at least three full academic years of college or the baccalaureate degree before applying to the professional school. Students should see a counselor for specific information, and visit www.avma.org, www.aavmc.org, www.aavsb.org, www.vetmed.ucdavis.edu, or www.westernu.edu.

Pre-Veterinary courses at PCC typically include the following:

Biology 010A, 010B, 010C

Chemistry 001A, 001B, 008A, 008B

Physics 031A, 031B (or 002A, 002B or 001A, 001B, 001C)

Statistics 050

Academic Programs Leading To A Degree or Certificate



SECTION V

ACADEMIC PROGRAMS LEADING TO A DEGREE OR CERTIFICATE

REQUIREMENTS FOR THE CERTIFICATE OF ACHIEVEMENT

Students interested in developing advanced levels of proficiency in a career and technical area may pursue a Certificate of Achievement, which requires the completion of 18 units or more. Pasadena City College currently offers 87 Certificate of Achievement Programs in 37 subject areas. Employer feedback suggests that strong academic skills are critical for success in today's high-performance workplace. It is, therefore, strongly recommended that students also complete the requirements for the Associate in Science Degree (see page 91). Students may earn only one Associate in Science Degree with a Certificate of Achievement.

Some programs will include certain subjects required by the College or by state law. Beyond these minimum requirements, programs will vary widely depending upon the vocational or professional goal of the student. Students who change their vocational goals during their course of study may find it impossible to complete the curriculum in the customary span of time and may need to take additional courses. Students should consult counseling services for information about specific requirements, any pre-requisites or co-requisites, and to develop an education plan that will assist them in reaching their goal. Upon completion of the specified curriculum for a Career Technical Education program students may petition in the appropriate division office for issuance of the Certificate of Achievement. Students may earn multiple Certificates of Achievement.

All courses are described in **Section VII, Course Descriptions**. In instances where the help of a counselor is necessary for proper understanding of requirements, the student should not hesitate to contact the office of Counseling and Career Services. For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at www.pasadena.edu/academics/degrees-and-certificates/certificates-of-achievement/index.php.

OCCUPATIONAL SKILLS CERTIFICATES

Students, who want to develop job skills in a special area of occupational education in a short period of time, can earn an Occupational Skills Certificate, which requires 17 units or less.

REQUIREMENTS FOR ASSOCIATE DEGREES

Pasadena City College offers the following Associates degrees:

- Associate in Arts Degree (**AA**), (p.97)
- Associate in Arts for Transfer (**AA-T**), (p.106)
- Associate in Science for Transfer (**AS-T**), (p.106)
- Associate in Science Degree (**AS**) with the Certificate of Achievement (p.101)

- 1) **General Education Requirements:** a broad exposure to a variety of areas of study
- 2) **Major Preparation:** an in-depth study of a particular field or area of emphasis
- 3) **Electives:** courses selected by a student to meet the required units for a degree

These are the rules pertaining to degrees:

- All of the Associate degrees require at least sixty (60) units.
- Upon completion of requirements, a student will be granted an Associate in Arts, Associate in Arts for Transfer, Associate in Science for Transfer, and/or an Associate in Science Degree with Certificate of Achievement.
- Students may earn multiple Associate in Arts degrees as long they complete the major requirements for the various degrees.
- Students may earn only one Associate in Science (AS) degree with a Certificate of Achievement. (NOTE: Students may earn multiple Certificates of Achievement).

- ***Responsibility for filing a petition for graduation rests with the student, and all transcripts for high school and prior college work attempted, including test scores, must be on file for the petition to be considered.***
- File the petition for graduation in the Counseling Division by the published deadline date.

REQUIREMENTS FOR THE ASSOCIATE IN ARTS DEGREE (AA)

The Associate in Arts is awarded by Pasadena City College in recognition of completion of a minimum of 60 units which include the following:

- Major or area of emphasis in one of the disciplines listed below.
- One of the following general education patterns:
 - a. Traditional AA Degree – The PCC general education pattern, which is detailed in the section below.
 - b. The CSU General Education Requirements (CSU Breadth) detailed on page 98.
 - c. The Intersegmental General Education Transfer Curriculum (IGETC) detailed on page 96.

The Associate in Arts is awarded in the following disciplines:

- Architecture
- Business
- Chinese
- Communication Arts
- Engineering and Technology
- English – Literature
- French
- Gender, Ethnicity, and Multicultural Studies
- German
- Humanities
- Italian
- Japanese
- Kinesiology and Wellness
- Linguistics
- Music
- Natural Sciences
- Russian
- Social and Behavioral Sciences
- Spanish
- Speech Communication

GENERAL INFORMATION

1. A minimum of 60 units, 18 of which must be in one major or area of emphasis.
2. Only courses numbered 001–099 may be counted toward the 60 units.
3. All competency and general educational requirements must be completed.
4. A minimum grade point average of 2.00 must be obtained in courses numbered 001 to 099 completed at PCC and in comparable courses completed at other regionally accredited institutions.
5. At least 15 units of the required 60 units, in courses numbered 001–099, must be completed at PCC. No more than 6 units may be transferred from another college if earned after the student's last enrollment at PCC. Active-duty service members can complete PCC's academic residency at any time they are enrolled. Reservists and National Guardsmen on active-duty are covered in the same manner.
6. Courses **may not** be counted more than once to meet the general education requirements (Areas A-G). A course may be used to satisfy the requirements of a major as well as the general education requirements, but the units shall count only once.
7. The AA general education pattern explained below does not prepare students for transfer. Students who intend to transfer to a CSU, UC, or private school are advised to complete the CSU Breadth, IGETC, or the unique general education pattern of the private school.

COMPETENCY REQUIREMENTS

1. **Reading** – One course (with grade C or better) from the following: English 001A, 001AH, 001AS, 001C, 001CH, 014, 100, 130, any English course which fulfills Area C (Humanities), or by satisfactory score on equivalency exam.
2. **Written Expression** – One course (with grade C or better) from the following: English 001A, 001AH, 001AS, or by satisfactory score on equivalency exam.
3. **Mathematics** – Complete one course (with grade C or better) from one of the following: Business 014A, 014B, Computer Science 045, Mathematics 131, 139, 141, 150, Statistics 015, 018, 050, or a Math course

that fulfills the general education requirement in Critical Thinking or by satisfactory score on an equivalency exam.

4. **Diversity** – Complete three (3) units in courses designated as either “Global Studies” or “Ethnic and Gender Studies” as listed in this *College Catalog* starting on page 79. The courses which can satisfy the diversity requirement and are also general education are designated by the (!) symbol in the list below.

GENERAL EDUCATION REQUIREMENTS

A. Natural Sciences (By local rule, the course must include a laboratory component. Lecture and lab must be in the same discipline.) 3 units

Anatomy 025
 Anthropology 001†, 001H† and 001L
 Astronomy 001
 Biology 002, 003, 004, 010A, 010B, 011, 011H, 014, 016, 030, 038, 039
 Chemistry 001A, 001B, 002A, 002B, 008A, 008B, 022
 Environmental Studies 001, 003, 030, 040
 Geography 001 and 001L
 Geology 001, 001F, 002, 002F, 003, 003F, 004 and 040, 006, 012 and 012F or 012L, 021 and 021L, 022 and 040, 030A-L, 040
 Microbiology 002
 Physical Science 003 and 003L
 Physics 001A, 001B, 001C, 001D, 002A, 002B, 010 and 010L, 031A, 031B
 Physiology 001

B. Social and Behavioral Sciences 3 units

Anthropology 001†, 001H†, 001L, 002†, 002H†, 003, 004, 005, 006, 009, 012†, 031†
 Child Development 015
 Communication 001
 Economics 001A, 001B
 English 012†
 Environmental Studies 002
 Geography 002†, 003†
 Gerontology 001
 History 001A†, 001B†, 002A†, 002B†, 005A†, 005B†, 007A, 007B, 008†, 009A†, 009B†, 012†, 016†, 018†, 019†, 025B†, 025D, 025F, 025I, 027A†, 027B†, 029A†, 029B†, 030†, 031†, 041†
 Linguistics 012†, 014, 016, 017
 Political Science 001, 002, 006, 007, 021, 022
 Psychology 001, 001H, 002, 005, 021, 021H, 022, 023, 024, 025, 029†, 031†, 033, 041†

Sociology 001, 002, 014†, 015, 016, 022, 024, 029†, 031†, 041†
 Social Sciences 017
 Speech 013

C. Humanities 3 units

American Sign Language 001, 002
 Arabic 001, 002
 Armenian 001, 002
 Architecture 024A, 024B
 Art 001A, 001B, 001C, 002†, 003A†, 003B†, 004A†, 004B†, 004C†, 004D, 005, 007†, 008†, 009†
 Chinese 001, 002, 002A, 003, 004, 005, 010†, 012†, 022, 050
 Cinema 007A, 007B, 025
 Dance 021A†, 021B†
 English 001B, 001BH, 005A, 005B, 009, 010, 011, 012†, 024, 025A, 025C†, 025D, 025E, 025F, 025G, 025H†, 025I†, 025J, 026, 030A, 030B, 030C, 044A†, 044B†, 044C†, 045A, 045B, 046A†, 046B†, 047†, 048†, 049A, 050†, 051†, 052†, 053, 054, 057, 058, 059, 060, 061, 078A, 078B, 082A, 082B, 082C
 French 001, 002, 003, 004, 006, 010†, 012, 016, 050
 German 001, 002, 003, 004, 005†, 010†, 012
 Humanities 001, 002, 003, 004
 Italian 001, 002, 003, 004, 010†, 012, 050†
 Japanese 001, 002, 003, 004, 005†, 010†, 012†
 Latin 001, 002
 Linguistics 010, 011, 012†
 Music 007A, 007B, 021†, 022, 023†, 024A, 24B, 025†, 027†, 028
 Philosophy 001, 001H, 003, 007, 008, 020A†, 020B†, 031†, 037
 Photography 010
 Portuguese 001, 002, 003, 004
 Religious Studies 001, 002†, 003†
 Russian 001, 002, 003, 004, 011†
 Spanish 001, 002, 002A, 003, 004, 005†, 006A†, 006B†, 012, 025†, 042A†, 042B†, 044A†, 044B†, 050
 Theater Arts 001, 005A, 005B, 007A
 Television and Radio 019

D. Language and Rationality. 9 units (3 units each)

1. **English Composition** 3 units
 English 001A, 001AH, 001AS, 001B, 001BH, 001C, 001CH
2. **Oral Communication** 3 units
 Speech 001, 001H, 010

3. Critical Thinking. 3 units

**Business 014A, 014B

Computer Information Systems 062

Computer Science 002, 006, 008, 045

English 001C, 001CH

**Mathematics 003, 005A, 005B, 005C, 007A,
007B, 009, 010, 015, 022, 038, 055, 055H

Philosophy 025, 030, 033

Physical Science 002

Speech 006, 012

**Statistics 015, 018, 050

**These courses also meet the mathematics
competency requirement

E. American Institutions 6 units

1. History 007A, 007B, 025B[†], 029A[†], 029B[†], 031[†],
or 041[†] 3 units

AND

2. Political Science 001 3 units

F. Health Education. 2 units

College 001

Counseling 012

Health Education 002A, 002E, 044, 050, 051, 052

Kinesiology-Theory 014

Nutrition 011, 025

G. Physical Activity/Kinesiology. 2 units

A maximum of 4 units of Physical Education/Kinesiology
Activity or Dance Activity (Dance 002, 021A, 021B
and 025 are excluded) may be counted toward the
degree. Music 061 may be substituted for 1 unit of PE/
Kinesiology activity each semester. Exemption is granted
if the student has a physical limitation and submits a
physician's recommendation which is approved by PCC
Health Services.

Diversity Requirements

PCC Policy #4100 on Graduation Requirements for Degrees
and Certificates states that a student who applies for
either an AA or AS degree "must demonstrate competency
in reading, writing, mathematics **and diversity.**" The
Diversity Requirement **states that a student must
complete** 3 units in courses designated as either "Global
Studies" or "Ethnic and Gender Studies."

GLOBAL STUDIES

Pasadena City College and the community it serves have
long been identified as closely tied to international, cul-
tural and educational affairs. The College provides out-
standing opportunities for students wishing to emphasize
international education.

1. Africa:

Anthropology 001, 001H (Physical Anthropology)

Art 002 (History of African and African-American Art)

History 002A-B (History of World Civilizations
To/From 1500)

History 024A (Special Topics in History-Africa)

History 027A (Traditional Africa)

History 027B (Modern Africa)

2. Asia:

Art 003A-B (History of Asian Art)

Chinese 008A-B (Introduction to Chinese
Conversation - Mandarin)

Chinese 009A-C (Chinese Conversation - Mandarin)

Chinese 010 (Chinese Civilization)

Chinese 012 (Chinese Literature in Translation)

English 048 (Asian Literature)

History 002A-B (History of World Civilization
To/From 1500)

History 018 (History of South Asia, Southeast Asia
and the Pacific)

History 019 (History of China, Japan, and Korea)

History 024B (Special Topics in History - Asia)

History 024G (Special Topics in History-World)

Japanese 005 (Reading and Composition)

Japanese 008A-B (Introduction to Japanese
Conversation)

Japanese 009A-C (Japanese Conversation)

Japanese 010 (Japanese Civilization)

Japanese 011 (Inside Japan)

Japanese 012 (Japanese Literature in Translation)

Music 027 (Asian Music)

Music 038C (Chinese Music Ensemble)

Religious Studies 002 (Comparative Religions:
Far East)

3. Europe:

Art 004B (History of European Medieval Art)

Art 004C (History of European Renaissance and
Baroque Art)

Anthropology 030E (Anthropological Field Studies -
England)

Anthropology 030F (Anthropological Field Studies -
Italy)

English 044A-C (Masterpieces of Literature)

English 046A-B (English Literature)

French 009A-B (French Conversation)

French 010 (French Civilization)

German 005 (Introduction to German Literature)

German 008 A-C (Introduction to German
Conversation)

German 010 (German Civilization)

History 001A-B (History of European Civilization
To/From 1715)

History 002A-B (History of World Civilizations To/From 1500)
 History 005A-B (History of Great Britain To/From 1714)
 History 024C (Special Topics in History – Europe)
 History 024G (Special Topics in History – World)
 Italian 008A-B (Introduction to Italian Conversation)
 Italian 010 (Italian Civilization)
 Italian 050 (Italian Film as Dramatic Literature)
 Music 021 (Music Appreciation)
 Philosophy 020A (History of Ancient Philosophy)
 Philosophy 020B (History of Modern Philosophy)
 Religious Studies 003 (Comparative Religions: Near East)
 Russian 011 (Russian Civilization)
 Spanish 005 (Introduction to Spanish Literature)
 Spanish 006A (Introduction to Spanish-American Literature)
 Spanish 006B (Introduction to Spanish-American Literature)
 Spanish 009A-C (Spanish Conversation)
 Spanish 025 (Spanish Composition)
 Spanish 042 A-B (Civilization of Spain and Portugal)

4. Latin America:

Art 007 (Pre-Columbian Art)
 Art 008 (History of Mexican and Chicano Art)
 Dance 004H (World Ethnic Dance: Spain/Portugal)
 History 008 (History of California)
 History 009A (Latin America: Pre-Columbian to 1825)
 History 009B (Latin America: 1825 to the Present)
 History 024D (Special Topics in History – Latin America)
 History 024G (Special Topics in History – World)
 History 030 (History of Mexico)
 Spanish 044 A-B (Civilization of Latin America)

5. Middle East:

Art 004A (History of Ancient Art in the West)
 Art 009 (History of Islamic Art)
 History 016 (History of the Middle East)
 History 024E (Special Topics in History – Middle East)
 Religious Studies 003 (Comparative Religions: Near East)

ETHNIC AND GENDER STUDIES

Pasadena City College promotes cross cultural understanding and an appreciation of diversity in all its forms. The courses listed below have been identified as providing that understanding and appreciation. Students wishing

to study American Indian, Asian American, Chicano and African American cultures are referred to the following general education courses:

(Courses preceded with an asterisk () are college courses approved by the California State Department of Education for school staff preparation in the history, culture and current problems of racial and ethnic minorities in accordance with Article 3.3, Education Code Section 13344.1.)*

1. African American Studies:

*Art 002 (History of African and African-American Art)
 *English 050 (Afro-American Literature)
 History 029A (African American History to 1865)
 History 029B (African American History from 1865)
 *Music 025 (Afro-American Music)
 *Psychology 029 (Psychology of the Afro-American)
 *Sociology 029 (Sociology of the African-American)

2. Asian American Studies:

English 052 (Asian American Literature)
 *History 041 (History of Asian Pacific Americans)
 *Psychology 041 (Psychology of the Asian American)
 *Sociology 041 (Sociology of the Asian American)

3. Chicano/Latina/o Studies:

*Anthropology 031 (Mexican and Chicano Culture)
 *Art 008 (History of Mexican and Chicano Art)
 *English 047 (Mexican and Chicano Literature)
 History 008 (History of California)
 *History 031 (History of Mexican Americans in the United States)
 *Philosophy 031 (Contemporary Chicano Philosophy)
 *Psychology 031 (Studies in Chicano Behavior)
 *Sociology 031 (Chicano Sociology)
 *Spanish 031 (Language of the Barrio)

4. Cross Cultural Studies:

Anthropology 002, 002H (Cultural Anthropology)
 Child Development 024E (Special Topics – Multicultural Issues)
 Dance 021A-B (Dance History: Cultural and Social Heritage)
 English 012/Linguistics 012 (Intercultural Communications)
 English 025I (Post-Colonial Literatures)
 Geography 002 (Cultural Geography)
 Geography 003 (World Regional Geography)
 Linguistics 012 (Intercultural Communication)
 Music 023 (Music Cultures of the World)
 Sociology 014 (Introduction to Ethnic Studies)

5. Gender Studies:

English 025C (Images of Women in Literature)
History 025B (Women in American Society)

6. Health Sciences Diversity Courses:

Anesthesia Technician 118 (Anesthesia Technician Clinical Seminar)
Dental Assisting 110 (Introduction to Dental Essentials)
Dental Assisting 111 (Applied Human Behavior)
Dental Assisting 123A (Chairside Techniques)
Dental Hygiene 104B (Clinical Dental Hygiene Theory and Practice)
Dental Hygiene 104C (Clinical Dental Hygiene Theory and Practice)
Dental Hygiene 109 (Dental Health Education and Communication)
Dental Hygiene 119A (Community Dental Health)
Dental Hygiene 121 (Clinical Practice in Alternative Settings)
Gerontology 001 (Introduction to Gerontology)
Gerontology 022 (Directed Studies in Gerontology)
Medical Assisting 111A (Medical Office Procedures I)
Nursing 050 (Foundational Nursing Care)
Nursing 051 (Beginning Nursing)
Nursing 052 (Intermediate Nursing Care)
Nursing 053 (Advanced Medical-Surgical Nursing)
Nursing 125 (Fundamental of Vocational Nursing – Theory)
Nursing 126 (Intermediate Vocational Nursing – Theory)
Radiologic Technology 113A/B (Clinical Learning Experience)

7. Native American Studies:

Anthropology 012 (American Indian Cultures)
*English 051 (Native American Mythology and Literature)
*History 012 (The North American Indian)

REQUIREMENTS FOR THE ASSOCIATE IN SCIENCE DEGREE

GENERAL INFORMATION

1. A minimum of 60 units and completion of a Certificate of Achievement.
2. Only courses numbered 001-199 may be counted towards the general education requirements as indicated in Areas A-G.
3. Courses numbered 001-399 may be counted towards the 60 units.
4. All competency and general education requirements must be completed.
5. A minimum grade point average of 2.00 both in courses numbered 001 to 399 completed at PCC and in comparable courses completed at other regionally accredited institutions.
6. At least 15 units of the required 60 units, in courses numbered 001-399, must be completed at PCC. No more than 6 units may be transferred from another college if earned after the student's last enrollment at PCC.
7. Courses may not be counted more than once to meet the general education requirements (Areas A-G). A course may be used to satisfy both the requirements of a major and of general education requirements, but the units shall count only once.

COMPETENCY REQUIREMENTS

1. **Reading** – One course (with grade C or better) from the following: English 001A, 001AH, 001AS, 001C, 001CH, 014, 100, 130, any English course which fulfills Area C (Humanities), or by satisfactory score on equivalency exam.
2. **Written Expression** – One course (with grade C or better) from the following: English 001A, 001AH, 001AS, or by satisfactory score on equivalency exam.
3. **Mathematics** – One course (with grade C or better) from the following: Business 014A, 014B, Computer Science 045, Math 131, 139, 141, 150, Statistics 015, 018, 050, or a math course which fulfills the general education requirement in Critical Thinking, or by satisfactory score on equivalency exam.
4. **Diversity** – Complete three (3) units in courses designated as either "Global Studies" or "Ethnic and Gender Studies" as listed in the following section. The courses which can satisfy the diversity requirement and are also general education are designated by the (†) symbol in the lists below.

GENERAL EDUCATION REQUIREMENTS:

- A. **Natural Sciences (Lecture and lab must be in the same discipline) 3 units**
Anatomy 025
Anthropology 001†, 001H* and 001L

Astronomy 001
 Biology 002, 003, 004, 010A, 010B, 011, 014, 016, 030, 038, 039
 Chemistry 001A, 001B, 002A, 002B, 008A, 008B, 022
 Environmental Studies 001, 003, 030, 040
 Geography 001 and 001L
 Geology 001, 001F, 002, 002F, 003, 003F, 004 and 040, 006, 012 and 012F or 012L, 021 and 021L, 022 and 040, 030A-L, 040
 Microbiology 002
 Physical Science 003 and 003L
 Physics 001A, 001B, 001C, 001D, 002A, 002B, 010 and 010L, 031A, 031B
 Physiology 001, 100

B. Social and Behavioral Sciences 3 units

Anthropology 001[†], 001H[†], 001L, 002[†], 002H[†], 003, 004, 005, 006, 009, 012[†], 031[†]
 Child Development 015
 Communication 001
 Economics 001A, 001B
 English 012[†]
 Environmental Studies 002
 Geography 002[†], 003[†]
 Gerontology 001
 History 001A[†], 001B[†], 002A[†], 002B[†], 005A[†], 005B[†], 007A, 007B, 008[†], 009A[†], 009B[†], 012[†], 016[†], 018[†], 019[†], 024A[†], 024B[†], 024C[†], 024D[†], 024E[†], 024F, 024G[†], 025B[†], 025D, 025F, 025I, 027A[†], 027B[†], 029A[†], 029B[†], 030[†], 031[†], 041[†]
 Linguistics 012[†], 014, 016, 017
 Political Science 001, 002, 006, 007, 021, 022
 Psychology 001, 001H, 021, 021H, 022, 023, 024, 025, 029[†], 031[†], 033, 041[†], 120
 Sociology 001, 002, 014[†], 015, 016, 022, 024, 029[†], 031[†], 041[†], 130 (2 units)
 Social Sciences 017
 Speech 013

C. Humanities 3 units

American Sign Language 001, 002, 010C, 010D
 Arabic 001, 002
 Architecture 024A, 024B
 Armenian 001, 002
 Art 001A, 001B, 001C, 002[†], 003A[†], 003B[†], 004A[†], 004B[†], 004C[†], 004D, 005, 007[†], 008[†], 009[†], 104, 105, 106
 Chinese 001, 002, 002A, 003, 004, 010[†], 012[†], 022, 050
 Cinema 007A, 007B, 025
 Dance 021A[†], 021B[†]
 English 001B, 001BH, 005A, 005B, 009, 010, 011, 012[†], 024, 025A, 025C[†], 025D, 025E, 025F, 025G, 025H, 025I[†], 025J, 026, 030A, 030B, 030C, 034,

035, 036, 037, 044A[†], 044B[†], 044C[†], 045A, 045B, 046A[†], 046B[†], 047[†], 048[†], 049A, 049B, 050[†], 051[†], 052[†], 053, 054, 057, 058, 059, 060, 061, 078A, 078B, 082A, 082B, 082C, 119
 French 001, 002, 003, 004, 006, 010[†], 012, 016, 050
 German 001, 002, 003, 004, 005[†], 010[†], 012
 Humanities 001, 002, 003, 004
 Italian 001, 002, 003, 004, 010[†], 012, 050[†]
 Japanese 001, 002, 003, 004, 005[†], 010[†], 011, 012[†]
 Latin 001, 002
 Linguistics 010, 011, 012[†]
 Music 007A, 007B, 021[†], 022, 023[†], 024A, 024B, 025[†], 027[†], 028
 Philosophy 001, 001H, 003, 007, 008, 020A[†], 020B[†], 031[†], 037
 Photography 010, 025 (Cinema 025)
 Portuguese 001, 002, 003, 004
 Religious Studies 001, 002[†], 003[†]
 Russian 001, 002, 003, 004, 011[†]
 Spanish 001, 002, 002A, 003, 004, 005[†], 006A[†], 006B[†], 012, 025[†], 031[†], 042A[†], 042B[†], 044A[†], 044B[†], 050
 Theater Arts 001, 005A, 005B, 007A (Cinema 007A), 007B (Cinema 007B)
 Television and Radio 019

D. Language and Rationality 9 units (3 units each)

1. **English Composition** 3 units
 Business 011A
 English 001A, 001AH, 001AS, 001B, 001BH, 001C, 001CH
2. **Oral Communication** 3 units
 Speech 001, 001H, 002, 010, 121
3. **Critical Thinking** 3 units
 **Business 014A, 014B
 Computer Information Systems 062
 Computer Science 002, 006, 008, 045
 English 001C, 001CH
 **Mathematics 003, 005A, 005B, 005C, 007A, 007B, 009, 010, 015, 022, 055, 055H, 131, 139, 141, 150
 Philosophy 025, 030, 033
 Physical Science 002
 Speech 006, 012
 **Statistics 015, 018, and 050
 **These courses also meet the mathematics competency requirement

E. American Institutions 3-6 units
May be satisfied by one of the following options:

OPTION I (one History and one Political Science course - 6 units)
History 007A, 007B, 025B[†], 025D, 029A[†],
029B[†], 031[†], or 041[†]..... 3 units
AND
Political Science 001 or 007 3 units

OPTION II (one course - 3 units)
American Institutions 125..... 3 units

F. Health Education 2 units

Biology 003
College 001
Counseling 012
Dental Hygiene 109[†]
Health Education 002A, 002E, 044, 050, 051, 052
Kinesiology-Theory 014
Nursing 050[†], 051[†], 052[†], 053[†], 125[†], 126[†], 127,
137, 138
Nutrition 011, 025
Physiology 001, 100

G. Physical Activity/Kinesiology 2 units

A maximum of 4 units of Physical Education/Kinesiology Activity or Dance (Dance 002, 021A, 021B, and 025 are excluded) may be counted toward the degree. Music 061 may be substituted for 1 unit of PE/Kinesiology Activity each semester. Exemption is granted if the student has a physical limitation and submits a physician's recommendation which is approved by PCC Health Services.

MAJOR REQUIREMENTS:

Major..... 18 units

Students must select a major from among the choices listed in the PCC Catalog listed under Degrees and Certificates beginning on page 83. Completing multiple Certificates of Achievement in the same field of study does not result in multiple Associate in Science degrees being awarded.

Diversity Requirements

PCC Policy #4100 on Graduation Requirements for Degrees and Certificates states that a student who applies for either an AA or AS degree "must demonstrate competency in reading, writing, mathematics **and diversity.**" The Diversity Requirement **states that a student must complete** 3 units in courses designated as either "Global Studies" or "Ethnic and Gender Studies."

GLOBAL STUDIES

Pasadena City College and the community it serves have long been identified as closely tied to international, cultural and educational affairs. The College provides outstanding opportunities for students wishing to emphasize international education.

1. Africa:

Anthropology 001, 001H (Physical Anthropology)
Art 002 (History of African and African-American Art)
History 002A-B (History of World Civilizations To/From 1500)
History 024A (Special Topics in History-Africa)
History 027A (Traditional Africa)
History 027B (Modern Africa)

2. Asia:

Art 003A-B (History of Asian Art)
Chinese 008A-B (Introduction to Chinese Conversation - Mandarin)
Chinese 009A-C (Chinese Conversation - Mandarin)
Chinese 010 (Chinese Civilization)
Chinese 012 (Chinese Literature in Translation)
English 048 (Asian Literature)
History 002A-B (History of World Civilization To/From 1500)
History 018 (History of South Asia, Southeast Asia and the Pacific)
History 019 (History of China, Japan, and Korea)
History 024B (Special Topics in History - Asia)
History 024G (Special Topics in History-World)
Japanese 005 (Reading and Composition)
Japanese 008A-B (Introduction to Japanese Conversation)
Japanese 009A-C (Japanese Conversation)
Japanese 010 (Japanese Civilization)
Japanese 011 (Inside Japan)
Japanese 012 (Japanese Literature in Translation)
Music 027 (Asian Music)
Music 038C (Chinese Music Ensemble)
Religious Studies 002 (Comparative Religions: Far East)

3. Europe:

Art 004B (History of European Medieval Art)
Art 004C (History of European Renaissance and Baroque Art)
Anthropology 030E (Anthropological Field Studies - England)
Anthropology 030F (Anthropological Field Studies - Italy)
English 044A-C (Masterpieces of Literature)
English 046A-B (English Literature)

French 009A-B (French Conversation)
 French 010 (French Civilization)
 German 005 (Introduction to German Literature)
 German 008 A-C (Introduction to German Conversation)
 German 010 (German Civilization)
 History 001A-B (History of European Civilization To/From 1715)
 History 002A-B (History of World Civilizations To/From 1500)
 History 005A-B (History of Great Britain To/From 1714)
 History 024C (Special Topics in History – Europe)
 History 024G (Special Topics in History – World)
 Italian 008A-B (Introduction to Italian Conversation)
 Italian 010 (Italian Civilization)
 Italian 050 (Italian Film as Dramatic Literature)
 Music 021 (Music Appreciation)
 Philosophy 020A (History of Ancient Philosophy)
 Philosophy 020B (History of Modern Philosophy)
 Religious Studies 003 (Comparative Religions: Near East)
 Russian 011 (Russian Civilization)
 Spanish 005 (Introduction to Spanish Literature)
 Spanish 006A (Introduction to Spanish-American Literature)
 Spanish 006B (Introduction to Spanish-American Literature)
 Spanish 009A-C (Spanish Conversation)
 Spanish 025 (Spanish Composition)
 Spanish 042 A-B (Civilization of Spain and Portugal)

4. Latin America:

Art 007 (Pre-Columbian Art)
 Art 008 (History of Mexican and Chicano Art)
 Dance 004H (World Ethnic Dance: Spain/Portugal)
 History 008 (History of California)
 History 009A (Latin America: Pre-Columbian to 1825)
 History 009B (Latin America: 1825 to the Present)
 History 024D (Special Topics in History – Latin America)
 History 024G (Special Topics in History – World)
 History 030 (History of Mexico)
 Spanish 044 A-B (Civilization of Latin America)

5. Middle East:

Art 004A (History of Ancient Art in the West)
 Art 009 (History of Islamic Art)
 History 016 (History of the Middle East)
 History 024E (Special Topics in History – Middle East)
 Religious Studies 003 (Comparative Religions: Near East)

ETHNIC AND GENDER STUDIES

Pasadena City College promotes cross cultural understanding and an appreciation of diversity in all its forms. The courses listed below have been identified as providing that understanding and appreciation. Students wishing to study American Indian, Asian American, Chicano and African American cultures are referred to the following general education courses:

(Courses preceded with an asterisk () are college courses approved by the California State Department of Education for school staff preparation in the history, culture and current problems of racial and ethnic minorities in accordance with Article 3.3, Education Code Section 13344.1.)*

1. African American Studies:

*Art 002 (History of African and African-American Art)
 *English 050 (Afro-American Literature)
 History 029A (African American History to 1865)
 History 029B (African American History from 1865)
 *Music 025 (Afro-American Music)
 *Psychology 029 (Psychology of the Afro-American)
 *Sociology 029 (Sociology of the African-American)

2. Asian American Studies:

English 052 (Asian American Literature)
 *History 041 (History of Asian Pacific Americans)
 *Psychology 041 (Psychology of the Asian American)
 *Sociology 041 (Sociology of the Asian American)

3. Chicano/Latina/o Studies:

*Anthropology 031 (Mexican and Chicano Culture)
 *Art 008 (History of Mexican and Chicano Art)
 *English 047 (Mexican and Chicano Literature)
 History 008 (History of California)
 *History 031 (History of Mexican Americans in the United States)
 *Philosophy 031 (Contemporary Chicano Philosophy)
 *Psychology 031 (Studies in Chicano Behavior)
 *Sociology 031 (Chicano Sociology)
 *Spanish 031 (Language of the Barrio)

4. Cross Cultural Studies:

Anthropology 002, 002H (Cultural Anthropology)
 Child Development 024E (Special Topics – Multicultural Issues)
 Dance 021A-B (Dance History: Cultural and Social Heritage)
 English 012/Linguistics 012 (Intercultural Communications)
 English 025I (Post-Colonial Literatures)
 Geography 002 (Cultural Geography)

Geography 003 (World Regional Geography)
 Linguistics 012 (Intercultural Communication)
 Music 023 (Music Cultures of the World)
 Sociology 014 (Introduction to Ethnic Studies)

5. Gender Studies:

English 025C (Images of Women in Literature)
 History 025B (Women in American Society)

6. Health Sciences Diversity Courses:

Anesthesia Technician 118 (Anesthesia Technician Clinical Seminar)
 Dental Assisting 110 (Introduction to Dental Essentials)
 Dental Assisting 111 (Applied Human Behavior)
 Dental Assisting 123A (Chairside Techniques)
 Dental Hygiene 104B (Clinical Dental Hygiene Theory and Practice)
 Dental Hygiene 104C (Clinical Dental Hygiene Theory and Practice)
 Dental Hygiene 109 (Dental Health Education and Communication)
 Dental Hygiene 119A (Community Dental Health)
 Dental Hygiene 121 (Clinical Practice in Alternative Settings)
 Gerontology 001 (Introduction to Gerontology)
 Gerontology 022 (Directed Studies in Gerontology)
 Medical Assisting 111A (Medical Office Procedures I)
 Nursing 050 (Foundational Nursing Care)
 Nursing 051 (Beginning Nursing)
 Nursing 052 (Intermediate Nursing Care)
 Nursing 053 (Advanced Medical-Surgical Nursing)
 Nursing 125 (Fundamental of Vocational Nursing – Theory)
 Nursing 126 (Intermediate Vocational Nursing – Theory)
 Radiologic Technology 113A/B (Clinical Learning Experience)

7. Native American Studies:

Anthropology 012 (American Indian Cultures)
 *English 051 (Native American Mythology and Literature)
 *History 012 (The North American Indian)

REQUIREMENTS FOR TRANSFERRING TO A FOUR-YEAR COLLEGE OR UNIVERSITY

Information on a wide variety of transfer programs is available in the PCC Counseling Department and in the Transfer Center. Students are also encouraged to consult

the Web to investigate the many transfer options currently available throughout California and out of state. The following information will be helpful for use in developing a transfer plan to a four-year college or university. Students are encouraged to work with a member of Pasadena City College's counseling faculty and to utilize the services of the Transfer Center in order to make the transition from PCC to a four-year college or university easier.

TRANSFER BASICS

Students who wish to transfer to a university for a bachelor's degree typically take general education and major preparation courses at PCC. The college offers lower division major preparation for many university majors (Example: for transfer as a Business major to a CSU, students may take ACCT 001A, 001B, BUS 012A, BUS 014B, CIS 010, and ECON 001A/001B).

In most cases, the UC and CSU require a minimum of **60 transferable units** (courses numbered 001—099) to transfer at the upper-division (3rd year) level.

GENERAL EDUCATION +	MAJOR CLASSES & ELECTIVES =	TOTAL
Approximately 39 units +	21 units minimum =	60 units minimum

Some majors require more than 60 units to transfer due to extensive major preparation requirements. See a counselor to discuss high-unit majors such as biology, engineering, etc.

There are two paths to complete general education for transfer to the California public universities. Intersegmental General Education Transfer Curriculum (IGETC) for UC and CSU campuses. Or if you are only applying to CSU campuses you may complete the CSU Breadth requirements.

General education requirements vary for private 4-year and out-of-state colleges and universities. Some private and out-of state universities will accept the IGETC or CSU certification from a California community college such as PCC.

Specific articulation agreements with private and out-of state universities can be found at: <http://www.pasadena.edu/student-services/counseling/articulation.cfm>

TRANSFER WITH AN ASSOCIATE DEGREE

It is easy to prepare for transfer to a UC, CSU, or private university and earn an associate degree (AA, AA-T, or AS-T) at the same time.

ASSOCIATE IN ARTS/SCIENCE DEGREES FOR TRANSFER (AD-T)

— California Community Colleges are now offering Associate Degrees for Transfer (AD-T) to many four-year universities. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a university major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system, Historically Black Colleges or Universities (HBCU), Western Governors University (full online university) or participating non-profit, independent colleges in California, and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses. Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester (or 90 quarter) units. The AD-T degree may not be the best option for students intending to transfer to a particular CSU campus or to a non-participating university or college. Students should consult with a counselor when planning to complete the degree or for more information on university admission and transfer requirements.

To view the most current list of Pasadena City College Associate Degrees for Transfer (AD-T), please go to <http://www.pasadena.edu/academicprograms/transfer-degree.cfm>.

The AA-T and AS-T degrees, are awarded in the following disciplines:

- Administration of Justice (AS-T)
- Anthropology (AA-T)
- Art History (AA-T)
- Business Administration (AS-T)
- Communication Studies (AA-T)
- Early Childhood Education (AS-T)
- Economics (AA-T)
- Elementary Teacher Education (AS-T)
- English (AA-T)
- Film, Television and Electronic Media (AS-T)
- Geography (AA-T)
- Geology (AS-T)
- History (AA-T)
- Journalism (AA-T)
- Kinesiology (AA-T)
- Mathematics (AS-T)
- Music (AA-T)
- Nutrition and Dietetics (AS-T)
- Philosophy (AA-T)
- Physics (AS-T)
- Political Science (AA-T)

- Psychology (AA-T)
- Public Health Science (AS-T)
- Sociology (AA-T)
- Spanish (AA-T)
- Studio Arts (AA-T)
- Theatre Arts (AA-T)

SYSTEMWIDE GENERAL EDUCATION AGREEMENTS

The California State University and the University of California systems have developed system-wide general education agreements which enable community college transfer students to complete lower division courses that satisfy general education requirements at many CSUs and UCs.

The Intersegmental General Education Transfer Curriculum (IGETC) is a series of courses that prospective transfer students may complete at PCC to satisfy lower division breadth/general education requirements at both the University of California and the California State University. IGETC is most helpful to students who want to transfer but have not yet decided upon a particular CSU or UC campus. It is applicable to many but not all majors, and students should consult the specific UC or CSU campus for additional information on IGETC acceptability, particularly for high-unit majors such as engineering, architecture, and a number of the physical and life sciences.

The CSU General Education Breadth Requirements have been developed by the CSU system and the community colleges to enable a prospective transfer student to satisfy the lower-division general education requirements for many CSU campuses. The CSU General Education Breadth Requirements List specifies community college courses that may be used to satisfy each of the CSU subject areas for general education at the lower division.

The IGETC and the CSU General Education system-wide requirements – as well as the PCC courses that satisfy them – are listed on the next few pages. Students are encouraged to meet with a counselor for additional information, as well as to develop a transfer plan that includes both general education and major preparation components.

INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (IGETC)

The Intersegmental General Education Transfer Curriculum permits a student to transfer from a community college to a campus in either the California State University or the University of California system without the need, after transfer, to take additional lower division, general education courses to satisfy campus GE requirements.

Completion of the IGETC is not a requirement for transfer to a CSU or a UC, nor is it the only way to fulfill the lower division, general education requirements of the CSU or UC prior to transfer. As an alternative, students transferring to the CSU may choose to follow the General Education Certification Program. Students may also elect to fulfill the graduation requirements listed in the catalog of any specific CSU or UC campus.

Students who complete all requirements in IGETC for CSU or UC are eligible to earn a Certificate of Achievement which will be noted on the final transcript. Students are encouraged to meet with a counselor for complete information.

Due to substantial lower division prerequisites in high-unit majors such as engineering, architecture, and the physical and natural sciences, IGETC may be an inappropriate option. Individual colleges or majors within a UC campus may not accept IGETC for meeting general education. A list of those UC colleges and majors is found on the following campus guidance for IGETC website: <http://admission.universityofcalifornia.edu/transfer/general-education-igetc/igetc/igetc-campus-guidance/index.html>. Please consult a PCC counselor for additional information.

If IGETC is chosen as the option to fulfill the general education requirements, all areas must be met with minimum grades of C or Pass prior to transfer.

IGETC COURSES

AREA 1 – ENGLISH COMMUNICATION

All students must complete two courses, 6 semester units (or 8–10 quarter units), one from Group A and one from Group B. Students transferring to a CSU must also complete one course, 3 semester units (or 4–5 quarter units) from Group C.

GROUP A: English Composition 3 units
English 001A, 001AH, 001AS

GROUP B: Critical Thinking/English Composition 3 units
English 001C, 001CH
Philosophy 025, 025H
Physical Science 002

GROUP C: Oral Communication (CSU Requirement Only) 3 units
Speech 001, 010

AREA 2 — MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING 3 units
Complete one course, 3 semester units

(or 4–5 quarter units).

Business 014A, 014B†

Math 003†, 005A†, 005AH, 005B, 005BH, 005C, 005CH, 007A†, 007B†, 009†, 010, 015, 022, 055†, 055H†

Statistics 015, 018†, 050†, 050H

AREA 3 — ARTS AND HUMANITIES 9 units

Complete three courses, 9 semester units (or 12–15 quarter units); at least one course from the Arts and one course from the Humanities.

3A ARTS

Architecture 024A, 024B

Art 001A, 001B, 001C, 003A, 003B, 004A, 004B, 004C, 004D, 005, 007, 008, 009

Chinese 022, 050

Cinema 007A, 007B, 025

Dance 021A, 021B

French 050

Italian 050

Music 007A, 007B, 021, 022, 023, 024A, 024B, 025, 027, 028

Photo 010

Spanish 050

Theater Arts 001, 005A, 005B

3B HUMANITIES

Chinese 005, 010, 012

English 001B, 001BH, 010, 011, 024, 025A, 025C, 025D, 025E, 025F, 025G, 025H, 025I, 025J, 026, 030A, 030B, 030C, 044A, 044B, 044C, 045A, 045B, 046A, 046B, 047, 048, 049A, 050, 051, 052, 053, 054, 057, 058, 059, 060, 061, 078A, 078B, 082A, 082B, 082C

French 006, 010, 012, 016

German 005, 010, 012

*History 001A, 001B, 002A, 002B, 005A, 005B, 007A, 007B, 008, 009A, 009B, 012, 016, 018, 019, 025B, 025D, 025F, 025I, 027A, 027B, 029A, 029B, 030, 031, 041

Humanities 001, 002, 003, 004

Italian 010, 012

Japanese 005, 010, 012

Linguistics 010, 011

Philosophy 001, 001H, 003, 007, 008, 020A, 020B, 031, 037

Religious Studies 001, 002, 003

Russian 011

Spanish 005, 006A, 006B, 012, 025, 031, 042A†, 042B†, 044A†, 044B†

AREA 4 — SOCIAL AND**BEHAVIORAL SCIENCES..... 9 units**

Complete three courses, 9 semester units (or 12–15 quarter units) from at least two disciplines.

American Sign Language 015
 Anthropology 001*, 001H, 002, 002H, 003, 004, 005, 006, 009, 012, 031
 Economics 001A, 001AH, 001B, 001BH
 English 012
 Environmental Studies 002†
 Geography 002, 003
 Global Studies 001, 002
 Health Education 051
 *History 001A, 001B, 002A, 002B, 005A, 005B, 007A, 007B, 008, 009A, 009B, 012, 016, 018, 019, 025B, 025D, 025F, 025I, 027A, 027B, 029A, 029B, 030, 031, 041
 Linguistics 012, 014, 016, 017
 Political Science 001, 002, 006, 007, 021, 022
 Psychology 001, 001H, 002, 003, 005, 021†, 021H, 022†, 023, 024†, 025, 029, 031, 033, 041
 Sociology 001, 002, 014, 015, 016, 022, 024, 029, 030, 031, 041
 Social Sciences 017
 Speech 013

AREA 5 — PHYSICAL AND**BIOLOGICAL SCIENCES..... 7 units**

Complete at least two courses, 7 to 9 semester units (or 9–12 quarter units); one Physical Science course and one Biological Science course. Laboratory course in 5C must be associated with a lecture component in at least one of the courses completed in either 5A or 5B.

5A Physical Sciences

Astronomy 001†, 012†
 Chemistry 001A†, 001B†, 002A†, 002B†, 008A, 008B, 022
 Environmental Studies 001†, 003
 Geography 001, 004
 Geology 001†, 002, 003†, 004, 006, 012†, 021, 022
 Physical Sciences 003†
 Physics 001A†, 001B†, 001C†, 001D†, 002A†, 002B†, 010†, 031A†, 031B†

5B Biological Sciences

Anatomy 025†
 Anthropology 001*, 001H
 Biology 002, 003†, 004, 010A, 010B, 010C†, 011†, 011H, 014, 016†, 038†, 039†
 Microbiology 002
 Physiology 001†
 Psychology 002

5C Science Courses With Laboratory

Component (may be same course from 5A or 5B, or a laboratory related to a lecture course completed in either 5A or 5B)

Anatomy 025†
 Anthropology 001L*
 Astronomy 001†
 Biology 002†, 003†, 004†, 010A, 010B, 011†, 011H, 014, 016†, 038†, 039†
 Chemistry 001A†, 001B†, 002A†, 002B†, 008A, 008B, 022
 Environmental Studies 001†, 003
 Geography 001L
 Geology 001†, 001F†, 002, 002F, 003†, 003F†, 006, 012F†, 012L, 021L
 Microbiology 002
 Physical Sciences 003L†
 Physics 001A†, 001B†, 001C†, 001D†, 002A†, 002B†, 010L†, 031A†, 031B†
 Physiology 001†

ADDITIONAL REQUIREMENTS**I. FOREIGN LANGUAGE – UC REQUIREMENT ONLY**

Students must provide proof of proficiency equivalent to two years of high school study in the same language. An official copy of high school transcript(s) must be submitted for IGETC certification.

The following courses fulfill this requirement:

American Sign Language 002, 003, 004
 Arabic 002; Armenian 002; Chinese 002†, 002A†, 003, 004; French 002, 003, 004; German 002, 003, 004; Italian 002, 003, 004; Japanese 002, 003, 004; Latin 002; Portuguese 002, 003, 004; Russian 002, 003, 004; Spanish 002†, 002A†, 003, 004

II. UNITED STATES HISTORY, CONSTITUTION AND AMERICAN IDEALS – CSU REQUIREMENT ONLY

Not part of IGETC. May be completed prior to transfer; however, courses used to meet this requirement may also be used in areas 3 and/or 4 of this document with the approval of the CSU campus where a student is accepted.

6 units required: one course from (A) and one course from (B)

*(A) Political Science 001

*(B) History 007A, 007B, 025B, 029A, 029B, 031, 041

*Courses listed in more than one area may be certified **only** in a single area.

† Courses designated with a (†) have credit limitations for UC. Consult a counselor or www.assist.org. Select "PCC/UC Transferable courses."

CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION CERTIFICATION PROGRAM

California State University requirements for advanced undergraduate standing and general education are listed below. Requirements for the individual CSU campuses are similar, but students should consult specific catalogs as each may have additional requirements. For instance, a given campus may have added general education requirements so long as the requirement applies equally to native as well as transfer students.

Under this program, candidates for the Baccalaureate Degree at a California State University must meet the general education requirement of 48 units. A student may currently meet 39 units of this requirement at Pasadena City College. The remaining 9 units must be completed at the upper division level.

Students expecting to request general education certification should complete 39 units distributed among categories A through E as noted with no less than 30 units for areas A through D. Areas A and B4 must be fully completed with minimum grades of C prior to transfer. A single course may not meet more than one area requirement.

Students who complete all requirements of CSU GEs are eligible to earn a Certificate of Achievement which will be noted on the final transcript. Students are encouraged to meet with a counselor for complete information.

Students whose majors require more than 30 units should consult Counseling Services regarding the advisability of completing all major requirements instead of all general education requirements.

AREA A – ENGLISH LANGUAGE COMMUNICATION AND CRITICAL THINKING 9 units

Students must complete 9 semester units (or 12–15 quarter units) with at least one course each from A1, A2, and A3.

A1 – ORAL COMMUNICATION 3 units
Speech 001, 010

A2 – WRITTEN COMMUNICATION 3 units
English 001A, 001AH, 001AS

A3 – CRITICAL THINKING 3 units
English 001C, 001CH
Philosophy 025, 025H, 030, 033
Physical Science 002
Speech 006, 012

AREA B – SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING 9 units

Students must complete 9 semester units (or 12–15 quarter units) with at least one course each from B1, B2, and B4. At least one of the science courses completed in B1 or B2 must contain a related laboratory component in B3.

B1 – PHYSICAL SCIENCE

Astronomy 001, 012
Chemistry 001A, 001B, 002A, 002B, 008A, 008B, 022
Environmental Studies 001, 003, 010, 011
Geography 001, 004
Geology 001, 002, 003, 004, 006, 012, 021, 022, 030A–M
Physical Sciences 003
Physics 001A, 001B, 001C, 001D, 002A, 002B, 010, 031A, 031B

B2 – LIFE SCIENCE

Anatomy 025
Anthropology 001, 001H
Biology 002, 003, 004, 010A, 010B, 010C, 011, 011H, 014, 016, 030, 038, 039
Microbiology 002
Physiology 001
Psychology 002

B3 – LABORATORY ACTIVITY (related to a lecture course taken to satisfy either B1 or B2)

Anatomy 025
Anthropology 001L
Astronomy 001
Biology 002, 003, 004, 010A, 010B, 011, 011H, 014, 016, 030, 038, 039
Chemistry 001A, 001B, 002A, 002B, 008A, 008B, 022
Environmental Studies 001, 003, 010, 011
Geography 001L
Geology 001, 001F, 002, 002F, 003, 003F, 006, 012F, 012L, 021L, 030A–M
Microbiology 002
Physical Sciences 003L
Physics 001A, 001B, 001C, 001D, 002A, 002B, 010L, 031A, 031B
Physiology 001

B4 – MATHEMATICS / QUANTITATIVE REASONING

Business 014A, 014B
Computer Science 002, 004, 006, 008, 045
Mathematics 003, 005A, 005AH, 005B, 005BH, 005C, 005CH, 007A, 007B, 008, 009, 010, 015, 022, 038, 055, 055H
Statistics 015, 018, 050, 050H

**AREA C – ARTS, LITERATURE, PHILOSOPHY,
AND FOREIGN LANGUAGE..... 9 units**

Students must complete 9 semester units (or 12–15 quarter units) with at least one course each in Arts and Humanities areas.

**C1 – ARTS (Arts, Cinema, Dance, Music,
Theater)**

Architecture 024A, 024B
Art 001A, 001B, 001C, 003A, 003B, 004A,
004B, 004C, 004D, 005, 007, 008, 009
Chinese 022, 050
Cinema 007A, 007B, 025
Dance 021A, 021B
French 050
Italian 050
Music 007A, 007B, 021, 022, 023, 024A,
024B, 025, 027, 028, 038A
Photo 010, 025 (Cinema 025)
Spanish 050
Theater Arts 001, 005A, 005B, 007A
(Cinema 007A), 007B (Cinema 007B),
Television and Radio 019

**C2 – HUMANITIES (Literature, Philosophy,
Languages Other Than English)**

American Sign Language 001, 002, 003, 004
Arabic 001, 002
Armenian 001, 002
Chinese 001, 002, 002A, 003, 004, 005,
010, 012
English 001B, 001BH, 005A, 005B, 009, 010,
011, 024, 025A, 025C, 025D, 025E, 025F,
025G, 025H, 025I, 025J, 026, 030A, 030B,
030C, 044A, 044B, 044C, 045A, 045B,
046A, 046B, 047, 048, 049A, 050, 051,
052, 053, 054, 057, 058, 059, 060, 061,
078A, 078B, 082A, 082B, 082C
French 001, 002, 003, 004, 006, 010, 012,
016
German 001, 002, 003, 004, 005, 010, 012
History 001A, 001B, 002A, 002B, 005A,
005B, 007A*, 007B*, 008, 009A, 009B,
012, 016, 018, 019, 025B*, 025D, 025F,
025I, 027A, 027B, 029A*, 029B*, 030,
031*, 041*
Humanities 001, 002, 003, 004
Italian 001, 002, 003, 004, 010, 012
Japanese 001, 002, 003, 004, 005, 010,
011, 012
Latin 001, 002
Linguistics 010, 011
Philosophy 001, 001H, 003, 007, 008, 020A,
020B, 031, 037

Portuguese 001, 002, 003, 004
Religious Studies 001, 002, 003
Russian 001, 002, 003, 004, 011
Spanish 001, 002, 002A, 003, 004, 005,
006A, 006B, 012, 025, 031, 042A, 042B,
044A, 044B

**AREA D – SOCIAL, POLITICAL, AND ECONOMIC
INSTITUTIONS AND BEHAVIOR,
HISTORICAL BACKGROUND..... 9 units**

Students must complete 9 semester units (or 12–15 quarter units) required with courses in at least two disciplines.

D – SOCIAL SCIENCES

American Sign Language 015
Global Studies 001, 002
Health Education 051
Social Sciences 017

D0 – SOCIOLOGY AND CRIMINOLOGY

Sociology 001, 002, 014, 015, 016, 022,
024, 029, 030, 031, 041

D1 – ANTHROPOLOGY AND ARCHAEOLOGY

Anthropology 001, 001H, 001L, 002, 002H,
003, 004, 005, 006, 009, 012, 031

D2 – ECONOMICS

Economics 001A, 001AH, 001B, 001BH
Geography 005

D3 – ETHNIC STUDIES

Anthropology 012, 031
History 012, 029A, 029B, 031*, 041*
Psychology 029, 031, 041
Sociology 014, 029, 031, 041

D5 – GEOGRAPHY

Geography 002, 003

D6 – HISTORY

History 001A, 001B, 002A, 002B, 005A,
005B, 007A*, 007B*, 008, 009A, 009B,
012, 016, 018, 019, 025B*, 025D, 025F,
025I, 027A, 027B, 029A*, 029B*, 030,
031*, 041*

**D7 – INTERDISCIPLINARY SOCIAL OR
BEHAVIORAL SCIENCE**

Child Development 015
Communication 001
English 012
Environmental Studies 002
Gerontology 001
Linguistics 012, 014, 016, 017
Speech 013

**D8 – POLITICAL SCIENCE, GOVERNMENT, AND
LEGAL INSTITUTIONS**

Political Science 001*, 002, 006, 007, 021,
022

D9 – PSYCHOLOGY

Psychology 001, 001H, 002, 003, 005, 021,
021H, 022, 023, 024, 025, 029, 031, 033,
041

American Institutions Requirement

All CSU campuses require a U.S. History and an American government course for CSU graduation. This requirement may be met with one asterisked () course in U.S. history within area **C2** or **D6**, AND with Political Science 1 (area **D8**).

Six units required: one course from (A) and one course from (B)

*(A) Political Science 001

*(B) History 007A, 007B, 025B, 029A, 029B,
031, 041

**AREA E – LIFELONG LEARNING AND
SELF-DEVELOPMENT 3 units**

Students must complete 3 semester units (or 4–5 quarter units). Maximum of 1 unit of Dance Activity or PE/ Kinesiology Activity (KINA).

Anthropology 002, 002H

College 001

Counseling 012

Dance 002, 003, 004H, 005A–B,
006A–B, 008A–B, 009A–D, 010,
011A–D, 012, 013, 014A, 015A–D, 022A–C,
(maximum of 1 unit)

Health Education 002A, 002E, 044, 052

Kinesiology/Physical Education Activity–
KINA 003A–E, 027, 028A–B, 029A–C, 030,
032A–C, 033, 034A–B, 036, 037, 038,
039A–D, 040A–C, 046A–C, 048A–C, 050A–C,
054A–C, 065A–C, 069, 081A–C
(maximum of 1 unit)

Nutrition 011

Psychology 001, 001H, 003, 021, 021H, 022,
023, 024

Sociology 002, 022, 024

NOTE: Courses may not be used in more than one area.

CATALOG RIGHTS

When graduation requirements are revised, a student with continuous enrollment may graduate under the new requirements or the requirements in effect at the time of the student's initial enrollment. Continuous enrollment is defined as attending PCC at least one semester during each academic year without missing two consecutive semesters. A student whose first term of enrollment at Pasadena City College is the Summer of 2009 may elect to graduate under the provisions of the *2008–2009 Catalog* if he/she maintains continuous enrollment. Students whose first term is the Fall of 2009, or any term thereafter, must follow the provisions of the appropriate subsequent *Catalog*.

PHILOSOPHY OF GENERAL EDUCATION

General education requirements guide the student toward an intelligent understanding of the whole self and of the physical and social world. These requirements encourage the student to explore different areas of human inquiry not only to gain a basic understanding of these areas, but also to comprehend and use the principles, methods, values and thought processes of these disciplines. These explorations include an examination of the physical universe, its life forms and natural phenomena, human behavior and artistic and creative accomplishments. Basic to these studies and to the student's effectiveness in society is the capacity to think clearly, logically and analytically; to communicate clearly both orally and in writing; to perform quantitative functions; to find information; and to examine and evaluate that information using critical thinking skills.

After completing the general education requirements, the graduate should have the skills, knowledge, and insights to evaluate and appreciate the physical environment, culture, and society. To promote these skills and knowledge, Pasadena City College has developed Institutional Learning Outcomes and Competencies. The major areas of knowledge and skills that these outcomes seek to address are found on page 17 of this *Catalog*.

Academic Programs Leading To A Degree Or Certificate

AA = Associate in Arts **AS** = Associate in Science **ADT** = Associate Degree for Transfer to CSU
CA = Certificate of Achievement **OSC** = Occupational Skills Certificate

DIVISIONS

BUS = Business **ENG** = English **E&T** = Engineering & Technology **HSC** = Health Sciences
KHA = Kinesiology, Health & Athletics **LANG** = Languages **LIB** = Library **MSC** = Math & Computer Science
NAT = Natural Sciences **PCA** = Performing and Communication Arts **SOC** = Social Sciences
VAMS = Visual Arts & Media Studies

Degree Title	DIV	AA	AS	ADT	CA	OSC	Page
ACCOUNTING							
Certified Bookkeeper	BUS		X		X		121
ADMINISTRATION OF JUSTICE							
Administration of Justice	BUS		X	X	X		122, 123
ANESTHESIA							
Anesthesia Technology	HSC		X		X		124
ANTHROPOLOGY							
Anthropology	SOC			X			125
ARCHAEOLOGY							
Archaeological Field Work	SOC					X	127
ARCHITECTURE							
Architecture	VAMS	X					129
ART							
Art History	VAMS			X			130
Studio Art	VAMS		X		X		131
Studio Arts	VAMS			X			132
AUTOMOTIVE TECHNOLOGY							
All Automotive Systems	E&T		X		X		134
Automotive Electrical Systems Technician	E&T				X		135
Engine Performance Technician	E&T		X		X		135
Heating & Air Conditioning Technician	E&T					X	136
Powertrain Technician	E&T		X		X		137
Undercar Technician	E&T		X		X		137
Underhood Technician	E&T				X		138
BIOLOGICAL TECHNOLOGY							
Biological Technology	NAT		X		X		139
Computational Biology	NAT				X		140
Laboratory Assistant	NAT				X		141
Laboratory Skills	NAT					X	142
Stem Cell Culture	NAT				X		143

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BUS = Business **ENG** = English **E&T** = Engineering & Technology **HSC** = Health Sciences
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NAT = Natural Sciences **PCA** = Performing and Communication Arts **SOC** = Social Sciences
VAMS = Visual Arts & Media Studies

Degree Title	DIV	AA	AS	ADT	CA	OSC	Page
BUILDING CONSTRUCTION							
Building Construction	E&T		X		X		144
Cabinetmaking & Millwork	E&T					X	145
Construction Inspection	E&T		X		X		146
Construction Law	E&T					X	147
BUSINESS ADMINISTRATION							
Business	BUS	X					147
Business Administration	BUS			X			148
Customer Service	BUS					X	149
Entrepreneurship	BUS					X	150
Entrepreneurship and Small Business Management	BUS		X		X		151
Financial Investments	BUS		X		X		152
International Business/Trade	BUS		X		X		152
Management	BUS		X		X		153
Marketing Management	BUS		X		X		154
Retail Management	BUS		X		X		155
BUSINESS INFORMATION TECHNOLOGY							
Administrative Assistant	BUS		X		X		155
Business Information Worker	BUS		X		X		157
Business Information Worker II	BUS		X		X		157
Business Software Specialist	BUS		X		X		158
Office Assistant	BUS		X		X		159
CHILD DEVELOPMENT							
Administration	SOC		X		X		160
Child Development	SOC		X		X		162
Early Childhood Education	SOC			X			165
Early Intervention	SOC		X		X		166
Infant/Toddler	SOC		X		X		168
Instructional Assistant	SOC				X		164
Language & Literacy	SOC		X		X		170
Multicultural Awareness	SOC		X		X		172
Music & Movement Education for Young Children	SOC					X	174
School Age Instructional Assistant	SOC					X	174
Science and Math Integration	SOC		X		X		175
Special Education	SOC		X		X		177
Special Education Assistant	SOC					X	179

AA = Associate in Arts **AS** = Associate in Science **ADT** = Associate Degree for Transfer to CSU
CA = Certificate of Achievement **OSC** = Occupational Skills Certificate

DIVISIONS

BUS = Business **ENG** = English **E&T** = Engineering & Technology **HSC** = Health Sciences
KHA = Kinesiology, Health & Athletics **LANG** = Languages **LIB** = Library **MSC** = Math & Computer Science
NAT = Natural Sciences **PCA** = Performing and Communication Arts **SOC** = Social Sciences
VAMS = Visual Arts & Media Studies

Degree Title	DIV	AA	AS	ADT	CA	OSC	Page
CINEMA							
Cinema - Cinematography	VAMS					X	180
Cinema - Cinema Production/Filmmaking	VAMS					X	181
COMMUNICATION STUDIES							
Communication Arts	PCA	X					182
Communication Studies	PCA			X			186
Speech Communication	PCA	X					187
COMPUTER INFORMATION SYSTEMS							
CCNA Routing & Switching Preparation	BUS					X	188
CCNP Routing & Switching Preparation	BUS					X	188
CISCO Advanced Network Engineer	BUS					X	189
Computer Retail Sales & Support	BUS		X		X		190
Cybersecurity	BUS		X		X		190
Help Desk/User Support	BUS		X		X		191
Programming	BUS		X		X		192
System and Network Administrator	BUS		X		X		193
Web Development	BUS		X		X		194
COSMETOLOGY							
Cosmetology	E&T		X		X		195
Instructional Techniques in Cosmetology	E&T				X		196
CULINARY ARTS							
Culinary Arts	E&T		X		X		197
Baking & Pastry	E&T					X	198
Catering	E&T					X	198
Kitchen Assistant	E&T					X	199
DANCE							
Dance	PCA	X					200
DENTAL							
Dental Assisting	HSC		X		X		202
Dental Hygiene	HSC		X		X		204
Dental Laboratory Technology	HSC		X		X		205
Restorative Dental Technology	HSC		X		X		208

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Degree Title	DIV	AA	AS	ADT	CA	OSC	Page
DESIGN STUDIES							
Industrial Design	VAMS					X	210
Interior Design	VAMS					X	211
Jewelry/Metalworking	VAMS					X	212
Product Design	VAMS		X		X		212
Product Design - Graphics	VAMS		X		X		214
Product Design - Technology	VAMS		X		X		215
DESIGN TECHNOLOGY							
CAD Designer - Architecture/Engineering/Construction	E&T					X	216
CAD Modeling and Animation - Architecture/Engineering/Construction	E&T					X	216
CAD Technician - Architecture/Engineering/Construction	E&T					X	217
CAD Technician - Mechanical Design and Manufacturing	E&T					X	218
Design Technology Mechanical + Manufacturing	E&T		X		X		218
DIGITAL MEDIA							
Digital Media - Animation & Motion Arts	VAMS		X		X		220
Digital Media - Design/Media Arts Foundation	VAMS		X		X		221
Digital Media - Game Design & Development	VAMS		X		X		222
Digital Media - Graphic Design	VAMS		X		X		223
Digital Media - Interactive Art & Design	VAMS		X		X		224
Digital Media - Web Design & Development	VAMS		X		X		226
ECONOMICS							
Economics	SOC			X			227
EDUCATION							
Elementary Teacher Education	SOC			X			228
ELECTRICAL & ELECTRONIC TECHNOLOGY							
Applied Circuits and Systems	E&T					X	232
Electrical Technology	E&T		X		X		232
Electronics Technology Basic Digital Technician	E&T					X	233
Photovoltaic Design & Installation	E&T		X		X		234
EMERGENCY MEDICAL TECHNOLOGY							
Basic Level Emergency Medical Technician	HSC					X	235

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Degree Title	DIV	AA	AS	ADT	CA	OSC	Page
ENGINEERING & TECHNOLOGY							
AS in Engineering: Civil Engineering Emphasis	E&T		X				235
AS in Engineering: Electrical Engineering Emphasis	E&T		X				236
AS in Engineering: Mechanical, Aerospace, and Manufacturing Engineering Emphasis	E&T		X				237
Engineering and Technology	E&T	X					237
Manufacturing Engineering Technician	E&T				X		240
Mechanical Engineering Technician	E&T				X		240
ENGLISH							
English	ENG			X			241
English Literature	ENG	X					243
FASHION							
Fashion Assistant	VAMS				X		245
Fashion - Design	VAMS		X		X		245
Fashion Marketing	VAMS					X	247
Historical Costume Making	VAMS					X	247
FIRE TECHNOLOGY							
Fire Academy Preparation	BUS					X	248
Fire Technology	BUS		X		X		249
FILM, TELEVISION AND ELECTRONIC MEDIA							
Film, Television and Electronic Media	VAMS		X				337
GENDER, ETHNICITY, AND MULTICULTURAL STUDIES							
Gender, Ethnicity, and Multicultural Studies	SOC	X					250
GEOGRAPHY							
Geography	NAT			X			252
Geotech (GIS)	NAT					X	253
GEOLOGY							
Geology	NAT			X			253
GERONTOLOGY							
Elder Care	HSC					X	254
Gerontology	HSC		X		X		254

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Degree Title	DIV	AA	AS	ADT	CA	OSC	Page
GRAPHIC COMMUNICATIONS TECHNOLOGY							
Apparel Graphics & Printing	VAMS					X	256
Computer Imaging and Composition	VAMS		X		X		256
Electronic Prepress	VAMS					X	257
Screen Printing	VAMS		X		X		258
Screen Printing for Small Business	VAMS					X	259
Textile Printing	VAMS					X	260
HISTORY							
History	SOC			X			260
HOSPITALITY MANAGEMENT							
Hospitality Management	BUS		X		X		262
HUMANITIES							
Humanities	SOC	X					263
JOURNALISM							
Journalism	VAMS			X			269
Photojournalism	VAMS		X		X		270
Printed Media	VAMS		X		X		271
KINESIOLOGY							
Kinesiology	KHA			X			272
Kinesiology & Wellness	KHA	X					274
Nutrition and Dietetics	KHA			X			277
Yoga Teacher Training	KHA		X		X		278
LANGUAGES							
Chinese	LANG	X					279
Foreign Language - Basic	LANG					X	280
Foreign Language - Intermediate	LANG					X	281
Foreign Language - Advanced	LANG					X	282
French	LANG	X					284
German	LANG	X					285
Italian	LANG	X					286
Japanese	LANG	X					286
Russian	LANG	X					287
Spanish	LANG	X		X			288, 289

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Degree Title	DIV	AA	AS	ADT	CA	OSC	Page
LIBRARY							
Archives and Digital Collections Assistant	LIB				X		290
Digitization Skills for Libraries & Cultural Heritage Institutions	LIB					X	291
Library Technology	LIB				X		291
LINGUISTICS							
Linguistics	LANG	X					292
MACHINE SHOP TECHNOLOGY							
Industrial Fabricator	E&T					X	294
MATHEMATICS							
Mathematics	MSC			X			295
MEDICAL ASSISTING							
Administrative & Clinical	HSC		X		X		296
Medical Office Administration	HSC		X		X		297
Medical Insurance Biller	HSC		X		X		298
MUSIC							
Commercial Music	PCA					X	298
Music	PCA	X		X	X		299, 301, 302
Music Entrepreneurship	PCA		X		X		304
NATURAL SCIENCES							
Natural Sciences	NAT	X					305
NURSING							
Certified Nursing Assistant	HSC					X	308
Registered Nursing	HSC		X		X		310
Vocational Nursing	HSC		X		X		312
Licensed Vocational Nurse to Registered Nurse	HSC		X		X		314
Licensed Vocational Nurse to Registered Nurse - Non-Degree 30 unit option	HSC						315
NUTRITION AND DIETETICS							
Nutrition and Dietetics	KHA			X			277
PARALEGAL STUDIES							
Paralegal Studies	BUS		X		X		317
PHILOSOPHY							
Philosophy	SOC			X			319

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Degree Title	DIV	AA	AS	ADT	CA	OSC	Page
PHOTOGRAPHY							
Digital Image Editing	VAMS					X	320
Foundation in Photography	VAMS					X	320
Photography	VAMS		X		X		321
Portrait Photography	VAMS					X	322
PHYSICS							
Physics	NAT			X			323
POLITICAL SCIENCE							
Political Science	SOC			X			323
PSYCHOLOGY							
Psychology	SOC			X			325
PUBLIC HEALTH SCIENCE							
Public Health Science	KHA			X			326
RADIOLOGY							
Radiologic Technology	HSC		X		X		327
SOCIAL & BEHAVIORAL SCIENCES							
Social & Behavioral Sciences	SOC	X					329
SOCIOLOGY							
Sociology	SOC			X			331
SPEECH-LANGUAGE PATHOLOGY							
Speech-Language Pathology Assistant	PCA		X				333
TELEVISION & RADIO							
Broadcast Journalism	PCA		X		X	X	336, 337
Film, Television, and Electronic Media	PCA			X			337
Media Programming & Management	PCA					X	339
Radio Production	PCA		X		X		339
Television Operations	PCA		X		X		340
Television Post Production	PCA					X	341
Television Production	PCA					X	342
Video Operations	PCA					X	342
Video Post-Production	PCA				X		343
Video Production	PCA		X		X		343
Writing For Film, Television & Radio	PCA					X	345

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Degree Title	DIV	AA	AS	ADT	CA	OSC	Page
Theater Arts	PCA			X			345
Theater Technology	PCA		X		X		346
Basic Welding	E&T					X	347
Construction Welding	E&T		X		X		348
Gas Tungsten & Gas Metal Welding	E&T		X		X		349



ACADEMIC PROGRAMS

ACCOUNTING

(Business Division)

Accounting – Certified Bookkeeper – Associate in Science Degree , Certificate of Achievement

Top Code: 0502.00

The curriculum prepares students to become (with experience) certified bookkeepers. This training is relevant to positions such as bookkeeping/accounting/auditing clerk, accounts payable clerk, accounts receivable clerk/collections, general ledger clerk or payroll clerk. Knowledge of accounting and spreadsheet software is necessary.

The curriculum is aimed at students passing the national Certified Bookkeeper exams administered by the American Institute of Public Bookkeepers (AIPB). For more information on this program go to www.aipb.org.

Optionally, students can also take a course to become a California Registered Tax Preparer (CRTP) to prepare to work as a para-professional in an accounting or CPA office. For more information go to www.ctec.org.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Be able to pass the national AIPB Certified Bookkeeping exams.
2. Be able to perform basic General Ledger, Accounts Receivable, Accounts Payable, basic payroll duties.

Requirements for the Certificate of Achievement (21 units):

ACCT 010 – Bookkeeping–Accounting (4)
ACCT 104A – Computerized Accounting–Quickbooks (3)
ACCT 104B – Payroll Accounting (3)
BIT 106 – Business Software–Introduction to Microsoft Office System (3)
BIT 133 – Business Software–Microsoft Excel (2)
BUS 112 – Business English (3)
BUS 114 – Business Mathematics (3)

Recommended Electives

ACCT 001A – Financial Accounting (5)
ACCT 001B – Managerial Accounting (4)
ACCT 104C – Income Tax Preparation (3)
BUS 012A – Business Law (3)
BUS 170 – Work Experience Internship (3)

Requirements for the Associate in Science Degree – see page 101.

ADMINISTRATION OF JUSTICE

(Business Division)

Administration of Justice – Associate in Science Degree , Certificate of Achievement

Top Code: 2105.00

The curriculum prepares students for entry-level positions as police officers, police reserve officers, police assistants and community service officers in police and sheriff's departments and for positions in private security, as well as preparation for careers in probation, parole and federal law enforcement agencies.

Emphasis is on critical thinking, oral communication skills and writing skills essential to today's law enforcement employees. Students are kept informed of changes in law enforcement such as community policing, laws of arrest, search and seizure and updates to the State penal code. Role-playing and Moot Court participation are included to enhance oral communication skills and preparation of written reports. Training is also provided in the area of crime analysis and use of computer technology in law enforcement.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Identify the education stages to successfully enter a law enforcement Academy consisting of academics, physical training, firearms, Code of Ethics requirements for the law enforcement officer as a professional.
2. Demonstrate a fundamental knowledge of the law enforcement profession consisting of the role of the police, the courts and corrections.
3. Explain an understanding of the role of the community in a partnership with law enforcement including interpersonal skills of effective written and oral communications plus critical thinking required of a law enforcement officer (i.e., community policing).
4. Outline and discuss the moral/legal aspects of the use of firearms, impact weapons, chemical agents, Laws of Evidence, the preparation of Search and Arrest Warrants and the collection of physical evidence at a crime scene.

Requirements for the Certificate of Achievement (37 units):

Recommended sequence:

Semester I

AJ 010 – Introduction to the Administration of Justice (3)

AJ 012 – Concepts of Criminal Law (3)

ENGL 100 – Reading and Writing Skills (4)

or ENGL 001A – Reading and Composition (4)

or ENGL 001AH – Honors Reading and Composition (4)

Semester II

AJ 014 – Legal Aspects of Evidence (3)

AJ 016 – Principles and Procedures of the Justice System (3)

AJ 185 – Homeland Security (3)

KINA 037 – Police-Fire Agility Training (1)

Semester III

AJ 018 – Community Relations (3)

AJ 019 – Principles of Investigation (3)

SPCH 001 – Fundamentals of Speech (3)

or SPCH 00H – Honors Fundamentals of Speech (3)

or SPCH 010 – Interpersonal Communication (3)

Semester IV

AJ 022 – Concepts of Enforcement Services (3)
AJ 128 – Use of Force (1)
AJ 130 – Firearms (1)
AJ 190 – Introduction to Forensics (3)

Recommended Electives

AJ 122 – Field Practice in Administration of Justice (2)
FIRE 110 – Introduction to Fire Technology (3)

Requirements for the Associate in Science Degree – see page 101.

Administration of Justice – Associate in Science Degree for Transfer to CSU

Top Code: 2105.00

The Associate in Science in Administration of Justice for Transfer (AS-T) prepares students for entry-level positions as police officers, police reserve officers, police assistants, and community service officers in police and sheriff's departments and for positions in private security as well as preparation for careers in probation, parole, and federal law enforcement agencies.

Emphasis is on critical thinking, oral communication skills, and writing skills essential to today's law enforcement employees. Students are kept informed of changes in law enforcement such as community policing, laws of arrest, search and seizure, and updates to the state penal code. Role playing and Moot court presentation are included to enhance oral communication skills and preparation of written reports. Training is also provided in the area of crime analysis and use of computer technology in law enforcement. All courses in the major must be completed with a grade of "C" or better.

Program Outcomes:

1. Identify the education stages to successfully enter a law enforcement Academy consisting of academics, physical training, firearms, Code of Ethics requirements for the law enforcement officer as a professional.
2. Demonstrate a fundamental knowledge of the law enforcement profession consisting of the role of the police, the courts and corrections.
3. Explain an understanding of the role of the community in a partnership with law enforcement including interpersonal skills of effective written and oral communications plus critical thinking required of a law enforcement officer (i.e., community policing).
4. Outline and discuss the moral/legal aspects of the use of firearms, impact weapons, chemical agents, Laws of Evidence, the preparation of Search and Arrest Warrants and the collection of physical evidence at a crime scene.

Associate in Science in Administration of Justice for Transfer Degree**REQUIRED (6 units)**

AJ 010 – Introduction to the Administration of Justice (3)
AJ 012 – Concepts of Criminal Law (3)

LIST A: Select 2 Courses from Below (6 units)

AJ 014 – Legal Aspects of Evidence (3)
AJ 018 – Community Relations (3)
AJ 019 – Principles of Investigation (3)

**LIST B: Select 2 Courses from Below
(Minimum 6 units)**

SOC 001 – Introduction to Sociology (3)
POLS 001 – Introduction to American Government and Politics (3)
or SOC 002 – Contemporary Social Problems (3)

PSYC 001 – Introductory Psychology (3)
STAT 018 – Statistics for Behavioral and Social Sciences (4)
or STAT 050 – Elementary Statistics (4)

Required Subtotal 18–19
CSU General Education or IGETC Pattern 37–39
CSU transferrable units to meet 60 unit maximum for degree 1–3

Degree Total.....60

ANESTHESIA

(Health Sciences Division)

Anesthesia Technology – Associate in Science Degree , Certificate of Achievement

Top Code: 1230.00

The Anesthesia Technician program prepares the student to be an integral member of the anesthesia patient care team. Emphasis is on fundamental and advanced clinical procedures to assist licensed anesthesia providers in the acquisition, preparation, and application of various types of equipment required for the delivery of anesthesia care.

Anesthesia technicians are integral members of the anesthesia patient care team. Their role is to assist licensed anesthesia providers in the acquisition, preparation and application of various equipment required for the delivery of anesthesia care. This may be performed in a variety of clinical settings such as: the operating room, interventional and diagnostic radiology, post anesthesia care unit, intensive care unit, cardiac cath lab, emergency room, endoscopy, dental suites, and ambulatory surgery centers.

Job responsibilities may include equipment maintenance and servicing such as cleaning, sterilizing, assembling, calibrating, testing, troubleshooting, and recording of inspections and maintenance. In addition, the anesthesia technician will assist licensed anesthesia providers with patient assessments, evaluations, transport, positioning, insertion of intravenous and other invasive lines, and airway management.

Certification/Accreditation/Eligibility:

A Certificate of Achievement and an Associate in Science degree is awarded upon completion of all required courses with a C or better. The two-year program includes one summer session.

Upon successful completion of the program, the student is eligible to take the American Society of Anesthesia Technicians/Technologists (ASATT) National Certification Examination to become certified as an Anesthesia Technician (Cer. A.T.)

Highlights of the PCC program include professional, experienced academic and clinical instructors, and a multitude of clinical sites with state-of-the-art technology and hands-on instruction. The Anesthesia Technician program is a partnership program with Kaiser Permanente.

Requirements for Admission:

1. Graduation from an accredited high school or equivalent.
2. Overall minimum GPA of 2.0 in all required prerequisite courses. An overall minimum GPA of 2.5 in the following prerequisite courses: Speech 010, Physiology 002A/002B or Anatomy 025 and Physiology 001, English 001A, and Chemistry 002A.
3. Current CPR/ Basic Cardiac Life Support (BCLS) certification.
4. Completion of application for admission into the program.

Program Outcomes:

1. Apply theory and knowledge of social sciences in effective communication with anesthesia care providers in the delivery of patient care.
2. Apply theory and knowledge of chemistry and biology to assist the anesthesia provider in the selection and operation of appropriate anesthesia equipment for patient care.
3. Apply theory and concepts in pharmacology specific to anesthesia surgical procedure in preparation of patient care.
4. Apply theory and knowledge of basic anatomy/physiology, and pathophysiology in assisting the anesthesia provider in the development of patient care plans.

Recommended Preparation:

High school courses in biology, anatomy/physiology, and chemistry with a laboratory.

**Requirements for the Certificate of Achievement
(30 units):****Summer Intersession I**

AT 110 – Professional Aspects of Anesthesia Technology (2)

AT 111 – Basic Principles of Anesthesia Technology (3)

Fall Semester II

AT 112 – Advanced Principles of Anesthesia Technology (3)

AT 113 – Anesthesia Pharmacology (3)

AT 114 – Basic Anesthesia Equipment–Theory and Lab (3)

AT 116 – Anesthesia Technology Clinical Experience I (5)

Spring Semester III

AT 115 – Advanced Anesthesia Equipment–Theory and Lab (3)

AT 117 – Anesthesia Technology Clinical Experience II (5)

AT 118 – Anesthesia Technology Case Study and Program Review (3)

Requirements for the Associate in Science Degree – see page 101.

**ANTHROPOLOGY
(Social Sciences Division)****Anthropology – Associate in Arts Degree for Transfer**

Top Code: 2202.00

Anthropology is the comprehensive study of humans, our ancestors, and our non-human primate relatives. The field explores what it means to be human, from prehistoric times to the present. Anthropologists investigate contemporary human social behaviors (cultural anthropology), the origins and nature of languages (linguistic anthropology), human evolution, variation and adaptation (physical anthropology), and the ancient life ways and cultural development of past human populations (archaeology). The anthropology program at Pasadena City College provides courses that enable students to complete lower division prerequisites and general education requirements for transfer to institutions of higher learning and/or receive an associate degree. The goal of the anthropology program is to prepare students to use the discipline's holistic perspective, research methods, and general knowledge in order to find reasonable solutions to human dilemmas. The Associate in Arts in Anthropology for Transfer Degree is designed to prepare the student for seamlessly transferring to the CSU to earn a baccalaureate degree in anthropology.

Associate Degree for Transfer Requirements

- 60 semester or 90 quarter CSU-transferable units.
- the California State University-General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.
- a minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district.
- obtainment of a minimum grade point average (GPA) of 2.0.
- earn a grade of C or better in all courses required for the major or area of emphasis.

Program Outcomes:

1. Demonstrate an understanding of the nature of scientific inquiry and its application to anthropological research.
2. Identify patterns and analyze the adaptive relationships between organisms and their environments.
3. Demonstrate an awareness of the diversity of past human societies and a comprehension of how archaeological evidence is used to reconstruct past processes of culture change.
4. Understand and articulate the breath of cultural beliefs and practices found across cultures and throughout time, with special emphasis on indigenous traditions.
5. Articulate an understanding of ethical principles and responsibilities in anthropological research using a relativistic framework.

Associate in Arts Degree in Anthropology for Transfer

REQUIRED CORE (9 units)

- ANTH 001 – Physical Anthropology (3)
or ANTH 001H – Physical Anthropology (3)
ANTH 002 – Cultural Anthropology (3)
or ANTH 002H – Honors Cultural Anthropology (3)
ANTH 003 – Introduction to Archaeology (3)

LIST A: (3 units)

- ANTH 001L – Laboratory in Physical Anthropology (1)
STAT 018 – Statistics for Behavioral and Social Sciences (4)
STAT 050 – Elementary Statistics (4)

LIST B: (3–5 units)

Area 1: Science Methods

- PSYC 005 – Research Methods in Psychology (4)

Area 2: Sciences

- ANAT 025 – General Human Anatomy (4)
GEOL 001 – Physical Geology (4)
GEOL 003 – Earth and Space Science (4)
GEOG 011 – Introduction to Geographic Information Systems and Techniques, with Lab (3)

LIST C: SELECT ONE (3 units) Any List A or B course not already used

- ANTH 004 – Anthropology of Religion, Magic, Witchcraft (3)
ANTH 005 – Introduction to Linguistic Anthropology (3)
ANTH 012 – American Indian Cultures (3)
ANTH 031 – Mexican and Chicano Culture (3)

REQUIRED SUBTOTAL..... 19–20
CSU General Education or IGETC CSU Pattern..... 37–39

DEGREE TOTAL 60

ARCHAEOLOGY

(Social Sciences Division)

Archaeological Field Work – Occupational Skills Certificate

Top Code: 2202.00

The Occupational Skills Certificate in Archaeological Fieldwork prepares students for entry-level work in cultural resource management. The program provides opportunities for students to actively engage in archaeological research in both a field and laboratory setting. Courses are designed to introduce students to a diverse range of professional skills, including survey and excavation techniques, mapping and documentation, and artifact identification, processing and analysis.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Employ archaeological survey, mapping, and excavation techniques in an active fieldwork setting.
2. Distinguish between the various attributes used to identify archaeological sites, features, and artifact forms.
3. Examine basic methodologies and techniques used in the processing and analysis of artifacts.
4. Assess the legal, operational, and ethical issues guiding archaeological research, cultural resource management, and heritage preservation.

Requirements for the Occupational Skills Certificate (17 units):

Required Courses

Required Core

ANTH 001 – Physical Anthropology (3)
or ANTH 001H – Honors Physical Anthropology (3)
ANTH 002 – Cultural Anthropology (3)
or ANTH 002H – Honors Cultural Anthropology (3)
ANTH 003 – Introduction to Archaeology (3)
ANTH 007 – Archaeological Artifact Analysis (3)
ANTH 040 – Applications of Archaeological Field Work (2)

Required Electives

Lab Requirement (select either GEOG course or ANTH courses)
GEOG 011 – Introduction to Geographic Information Systems and Techniques, With Lab (3)
or ANTH 140 – Advanced Applications of Archaeological Field Work (2)
and ANTH 001L – Laboratory in Physical Anthropology (1)

Recommended Electives

BIOL 002 – Animal Biology (4)
BIOL 030 – Field Botany (4)
ANTH 006 – Origins of Civilization (3)
GEOG 011 – Introduction to Geographic Information Systems and Techniques, With Lab (3)
ANTH 012 – American Indian Cultures (3)
ANTH 001L – Laboratory in Physical Anthropology (1)
ANTH 140 – Advanced Applications of Archaeological Field Work (2)



ARCHITECTURE

(Visual Arts and Media Studies Division)

Architecture – Associate in Arts Degree

Top Code: 2201.00

The Architectural major allows students to pursue an architectural education at a university level. It is designed for high-achieving students who seek a degree in a 5-year professional or 4-year non-professional degree university level undergraduate program in Architecture, Interiors Architecture, Environmental Design and Landscape Architecture in CSU, UC, and private schools. Curriculum in this major encompasses the first two years of architectural curriculum following standards outlined by the National Architectural Accreditation Board (NAAB) in architectural design, visual communications, materials and processes of construction, professional practice and history/theory. Courses focus on exploration and understanding of architecture's cultural, environmental, and formal relevance to both individuals and society as a whole. Architecture students are trained to think creatively, abstractly, and to develop design concepts for critical inquiry and design. Students apply current design principles and processes of architectural design that produce design solutions. Architecture students effectively convey their creative architectural design projects, research and essays realized through physical, digital and verbal presentation forms. These completed works are then studied and developed into portfolios of individual student accomplishment for transfer.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses students should consult with Counseling Services to determine the particular transfer requirements (specifically Math and Physics) required by public and private transfer institutions.*

This major is primarily intended to prepare students to transfer and earn a 4- or 5-year bachelor's degree in Architecture.

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete all 37 units in the discipline listed below:

Program Outcomes:

1. Apply creative and abstract thought to develop design concepts based on historical awareness and critical inquiry.
2. Execute architectural design and research solutions employing current design principles and processes of architectural design and research.
3. Convey creative architectural design projects, research and essays through physical, digital and verbal presentation forms.

Requirements for the major (37 units minimum)

ARCH 010A – Architectural Design Fundamentals (3)
ARCH 010B – Design Fundamentals (3)
ARCH 011 – Introduction to Architecture (2)
ARCH 012A – Visual Communications I (3)
ARCH 012B – Visual Communications II (Digital Media) (3)
ARCH 013 – Architectural Portfolio Preparation (3)
ARCH 014 – Materials and Processes of Construction (2)
ARCH 020A – Architectural Design (6)
ARCH 020B – Architectural Design (6)
ARCH 024A – History of Architecture (3)
ARCH 024B – History of Architecture (3)

Requirements for the Associate in Arts Degree – see page 97.

ART

(Visual Arts and Media Studies Division)

Art History – Associate in Arts Degree for Transfer to CSU

Top Code: 1001.00

The Associate in Arts Degree in Art History for Transfer at Pasadena City College promotes an understanding of art across cultures and geographic boundaries. Students are taught to apply fundamental art and art historical terminology, and an appreciation of process, to analyze works, in order to articulate the historical, social, and aesthetic functions of art.

The Associate in Arts Degree in Art History for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Program Outcomes:

1. Express an understanding of the contribution of art to humanity.
2. Communicate an understanding of the artistic contributions of diverse peoples.
3. Utilize critical thinking to discuss works of art in an historical context.
4. Demonstrate how works of art communicate visual meaning

Associate in Arts in Art History for Transfer Degree

REQUIRED CORE: 9 units

ART 001A – History of Western Art–Prehistoric through Medieval (3)

ART 001B – History of Western Art (3)

ART 011A – Foundation Drawing (3)

LIST A: Select One Course – 3 units

ART 002 – History of African and African-American Art (3)

ART 003A – History of Asian Art (3)

ART 003B – History of Asian Art (3)

ART 007 – Pre-Columbian Art (3)

ART 008 – History of Mexican and Chicano Art (3)

ART 009 – History of Islamic Art (3)

LIST B: Select One Course – 3 units

ART 012A – Beginning Life Drawing (3)

ART 016 – Perspective (3)

ART 020A – Beginning Painting (3)

ART 023A – Printmaking – Intaglio and Relief (3)

ART 023B – Printmaking–Lithography (3)

ART 023C – Printmaking–Monotype (3)

ART 025 – Beginning Sculpture (3)

ART 026 – Sculpture (3)

ART 031A – Color and Composition–Two Dimensional Design (3)

ART 032A – Design–Three Dimensional (3)

ART 034A – Crafts – Materials and Processes (3)

ART 038A – Ceramics (3)

ART 038B – Ceramics (3)

ART 039A – Handbuilt Ceramics (3)

ART 040 (DMA 010) – Introduction to Digital Arts (3)

ART 050A (DMA 020A) – Introduction to Graphic Design & Advertising (3)
 ART 051A (DMA 022A) – Typography – Lettering (3)
 PHOT 021 – Introduction to Black and White Photography (3)

LIST C: Select One Course – 3 units

ART 004A – History of Ancient Art in the West (3)
 ART 004B – History of European Medieval Art (3)
 ART 004C – History of European Renaissance and Baroque Art (3)
 ART 004D – History of Modern Art (3)
 ART 005 – Art Fundamentals (3)
 HIST 001A – History of European Civilization to 1715 (3)
 HIST 001B – History of European Civilization from 1715 (3)
 HIST 002A – History of World Civilizations to 1500 (3)
 HIST 002B – History of World Civilizations from 1500 (3)

Required Subtotal 18
 CSU General Education or IGETC CSU Pattern..... 37–39
 Transferable Electives (as needed to reach 60 transferable units)
DEGREE TOTAL 60

Studio Art – Associate in Science Degree , Certificate of Achievement

Top Code: 1001.00

This curriculum is appropriate for students seeking transfer to programs that focus on the practice of fine art, or who wish to pursue professional practice as a visual artist. (Suitable transfer programs at four- year colleges, universities, or art institutes include the traditional studio arts—drawing, painting, sculpture, printmaking and ceramics; programs in photography and digital media that have a fine arts emphasis; and studio art programs that are not media-specific, with names such as “new genres”).

Students completing the degree program will develop a portfolio of original artwork and prepare their work for exhibition. Students pursuing a Bachelor’s degree should research the specific requirements of desired transfer institutions and meet with a counselor, as completion of this certificate program is not a guarantee of acceptance. Students are advised to meet with a full-time visual arts faculty member for suggestions of potential transfer institutions and additional curriculum specific to their needs. (Students will be advised to complete the CSU-GE-Breadth or IGETC CSU pattern.)

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate proficiency in the use of tools and materials in at least one studio arts discipline.
2. Analyze the formal properties and social content of works of art, verbally and in writing.
3. Create a portfolio of original art work.

Requirements for the Certificate of Achievement (18 units):

REQUIRED CORE (ART 004D is CSU Transferable) – 6 units

ART 011A – Foundation Drawing (3)
 or ART 004D – History of Modern Art (3)
 or ART 106 – Art Since 1945 (3)

Required Capstone Course: Select one course from the following list: – 3 units

ART 075 – Exhibition and Presentation of Visual Art (3)
or ART 145 – Portfolio Development and Critique (3)

Required Electives

Studio Electives: Select three courses from the following. Include one B-Level or second level course:

ART 011B – Concepts in Drawing (3)
ART 011C – Portfolio Development of Drawing (3)
ART 012A – Beginning Life Drawing (3)
ART 012B – Life Drawing (3)
ART 020A – Beginning Painting (3)
ART 020B – Painting (3)
ART 020C – Painting (3)
ART 023A – Printmaking – Intaglio and Relief (3)
ART 023B – Printmaking–Lithography (3)
ART 023C – Printmaking–Monotype (3)
ART 024 – Printmaking – Silk Screen (3)
ART 025 – Beginning Sculpture (3)
ART 026 – Sculpture (3)
ART 027 – Sculpture Technology–Metal Casting and Mold Making (3)
ART 028 – Figure Sculpture (3)
ART 038A – Ceramics (3)
ART 038B – Ceramics (3)
ART 038C – Ceramics (3)
ART 039A – Handbuilt Ceramics (3)
ART 039B – Handbuilt Ceramics (3)
ART 039C – Handbuilt Ceramics (3)
ART 040 (DMA 010) – Introduction to Digital Arts (3)
ART 056 (DMA 012) – Introduction to Digital Painting & Drawing (3)
ART 057 (DMA 070) – Motion Graphics (3)
PHOT 021 – Introduction to Black and White Photography (3)
PHOT 022A – Large Format Photography (3)
PHOT 031 – Beginning Digital Photography (3)

Requirements for the Associate in Science Degree – see page 101.

Studio Arts – Associate in Arts Degree for Transfer to CSU

Top Code: 1002.00

The Associate in Arts Degree in Studio Arts for Transfer provides a solid preparation for transfer majors in the various areas of studio art, including ceramics, drawing, jewelry and craft, painting, printmaking, and sculpture. Additionally, the studio courses align well with preparation for transfer majors in related fields such as design, photography, cinema studies and other areas of study at UC, CSU, and private colleges and universities.

The Associate in Arts Degree in Studio Arts for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the major requirements and the Intersegmental General Education Transfer Curriculum (IGETC) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional local graduation requirements).

Program Outcomes:

1. Display competence in the use of tools, materials and concepts by completing a portfolio of original art and design projects.
2. Evaluate works of art and design through critical discussion and written assignments.
3. Demonstrate, through the analysis of aesthetic and cultural values, an understanding of the contribution of art and design to human experience.

Associate in Arts Degree in Studio Arts for Transfer Degree

REQUIRED CORE: 12 units

- ART 001B – History of Western Art (3)
- ART 011A – Foundation Drawing (3)
- ART 031A – Color and Composition–Two-Dimensional Design (3)
- ART 032A – Design–Three Dimensional (3)

LIST A: Select One Course (3 units)

- ART 001A – History of Western Art–Prehistoric through Medieval (3)
- ART 002 – History of African and African-American Art (3)
- ART 003A – History of Asian Art (3)
- ART 003B – History of Asian Art (3)
- ART 004A – History of Ancient Art in the West (3)
- ART 004B – History of European Medieval Art (3)
- ART 004C – History of European Renaissance and Baroque Art (3)
- ART 004D – History of Modern Art in Europe and America (3)

LIST B: Select Three Courses (9 units)

- ART 011B – Concepts in Drawing (3)
- ART 012A – Life Drawing–Beginning (3)
- ART 020A – Painting (3)
- ART 020B – Painting (3)
- ART 023A – Printmaking–Intaglio and Relief (3)
- ART 025 – Sculpture (3)
- ART 026 – Sculpture (3)
- ART 031B – Color Theory (3)
- ART 034A – Crafts–Materials and Processes (3)
- ART 036A – Jewelry/Metal Fabrication (3)
- ART 038A – Ceramics (3)
- ART 039A – Handbuilt Ceramics (3)
- ART 040 (DMA 010) – Introduction to Digital Arts (3)
- ART 050A (DMA 020A) – Introduction to Advertising/Graphic Design (3)
- ART 050B (DMA 020B) – Intermediate Advertising/Graphic Design (3)
- ART 051A (DMA 022A) – Lettering Fundamentals (3)
- PHOT 021 – Elementary Photography (3)

REQUIRED SUBTOTAL.....	24
CSU General Education or IGETC CSU Pattern.....	37–39
Transferable Electives (as needed to reach 60 transferable units)	

DEGREE TOTAL 60

AUTOMOTIVE TECHNOLOGY

(Engineering & Technology Division)

Automotive Technology – All Automotive Systems – Associate in Science Degree, Certificate of Achievement

Top Code: 0948.00

The curriculum prepares students for entry-level employment in automotive areas such as an apprentice mechanic, assistant technician, mechanic's helper, predelivery technician, installer, service technician, service attendant, or smog technician trainee. Students in the Automotive Technology program gain valuable hands-on experience in diagnosis and repair of vehicles while using the National Education Technicians Foundation (NATEF) task list as a guide. Instruction includes automotive engines, transmissions and drive lines (RWD & FWD) for both automatic and manual systems, suspension systems, braking systems (including ABS), air conditioning systems, and engine performance including most state and federally mandated requirements. Upon successful completion of the curriculum, students receive credit for one year of work experience when applying for certification by the National Institute of Automotive Service Excellence (ASE). This Certificate prepares students for the ASE 1-8 Professional Exams. ASE Student Examinations are administered within program courses.

This program has lab fees, uniform and DMV requirements. This curriculum is National Technicians Education Foundation (NATEF) approved and renewed in 2016.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Apply theories of automotive system fundamentals operation to practical diagnostic scenarios encountered during automotive service and repair.
2. Demonstrate the safe set-up and operation of diagnostic, hand, special service, and machine tools utilized by standard automotive repair industry.
3. Develop diverse skill sets pertaining to the National Automotive Technician Education Foundation (NATEF) standards and performance tasks.
4. Demonstrate technical and diagnostic skills while following the proper documentation process as required by the Bureau of Automotive Repair.

Requirements for the Certificate of Achievement (47 units):

Required Courses

AUTO 200 – Automotive Fundamentals for Technicians (4)
AUTO 206A – Basic Automotive Electrical Systems (4)
AUTO 201 – Engine Operation & Testing (6)
AUTO 206B – Automotive Electrical Systems (4)
AUTO 202 – Automatic Transmission and Transaxles (5)
AUTO 203 – Manual Transmission, Transaxle, and Drivetrain (5)
AUTO 205 – Automotive Brake Systems (4)
AUTO 204 – Automotive Suspension & Steering (6)
AUTO 208 – Engine Performance (6)
AUTO 207 – Automotive Heating & Air Conditioning (3)

Recommended Electives

BUS 011A – Business Communications (3)
BUS 160 – Sales and Customer Service (3)
MIT 101 – Introduction to Robotics (4)

Requirements for the Associate in Science Degree – see page 101.

Automotive Technology – Automotive Electrical Systems Technician – *Certificate of Achievement*

Top Code: 0948.00

The curriculum provides students with a strong foundation for the completion of other Automotive Technology certificates, including Electrical/Electronic Systems and All Automotive Systems. Automotive professionals who wish to update and/or upgrade their knowledge and skill set in automotive electrical/electronic systems will benefit from completion of this certificate. Students will gain valuable hands-on experience in proper diagnostic and service techniques used in automotive electrical/electronic systems. The use of precision measuring equipment and specialty tools are emphasized. Students are encouraged to take the Automotive Service Excellence (ASE) exam for electrical/electronic systems (A6). ASE Students Examinations are administered within program courses.

This program has lab fees, uniform, and DMV requirements. This curriculum is National Technicians Education Foundation (NATEF) approved and renewed in 2016.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Apply electrical/electronic systems theories of operation to practical diagnostic scenarios encountered during electrical/electronic automotive service and repair
2. Demonstrate the safe set up and operation of diagnostic, hand, and special service tools utilized by the electrical/electronic automotive repair industry.
3. Develop diverse skill sets pertaining to the National Automotive Technician Education Foundation (NATEF) electrical/electronic systems performance tasks.
4. Develop an electrical/electronic systems technician skill set, including basic customer service and writing skills to follow the legal aspects outlined by the California Bureau of Automotive Repay standards.

Requirements for the Certificate of Achievement: (12 units)

AUTO 200 – Automotive Fundamentals for Technicians (4)

AUTO 206A – Basic Automotive Electrical Systems (4)

AUTO 206B – Automotive Electrical Systems (4)

Recommended Electives

ELTY 012 – Basic Electricity–Electronics (Industrial Arts) (2)

or ELTN 109B – Applied Mathematics for Electronics (3)

This Certificate of Achievement is not eligible as a major for an Associate Degree.

Automotive Technology – Engine Performance Technician – *Associate in Science Degree, Certificate of Achievement*

Top Code: 0948.00

The curriculum prepares the student for entry-level employment as a diagnostician or for various manufacturer training courses. Students will gain valuable hands-on experience in diagnosing and repairing automotive engine driveability problems. Fuel injection, ignition and emission systems testing, and applicable laws will also be covered. Use of precision equipment including lab scopes, engine and emission analyzers and other specialty tools is emphasized. Students are encouraged to take the Automotive Service Excellence (ASE) Exams for Engine Performance (A8) Professional Examinations. ASE Student Certification Examinations are administered in these courses.

This program has lab fees, uniform and DMV requirements. This curriculum is National Technicians Education Foundation (NATEF) approved and renewed in 2016.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate the safe and appropriate use of engine diagnostic tools used in the automotive industry.
2. Apply fuel, ignition, and emission system theories of operation to practical diagnostic scenarios encountered during engine performance repairs.
3. Apply testing procedures related to NATEF standards to diagnose vehicle drivability issues.

Requirements for the Certificate of Achievement (24 units):

AUTO 200 – Automotive Fundamentals for Technicians (4)

AUTO 201 – Engine Operation & Testing (6)

AUTO 206A – Basic Automotive Electrical Systems (4)

AUTO 206B – Automotive Electrical Systems (4)

AUTO 208 – Engine Performance (6)

Requirements for the Associate in Science Degree – see page 101.

Automotive Technology – Heating & Air Conditioning Technician – *Occupational Skills Certificate*

Top Code: 0948.00

The curriculum prepares students for entry-level employment in automotive air conditioning repair or as preparation for master technician status. Students will receive instruction and hands-on experience in servicing, repair and diagnosis of automotive air conditioning systems. The Refrigerant Handlers Certification Examination given by International Mobile Air Conditioning Society (IMAC) is included in this training. The use of precision equipment and specialty tools is emphasized. Students are encouraged to take the Automotive Service Excellence (ASE) Exam for Heating and Air Conditioning (A7).

This program has lab fees, uniform and DMV requirements. This curriculum is National Technicians Education Foundation (NATEF) approved and renewed in 2016.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Apply automotive heating and air conditioning systems theories of operation to practical diagnostic scenarios encountered during automotive heating and air conditioning service repairs.
2. Demonstrate the proper set up and operation of automotive air conditioning systems refrigerant identification, recovery and recharging equipment.
3. Practice skills necessary to obtain the United States Clean Air Act Section 609 Certification through examination from the International Mobile Air Conditioning Society (IMAC).

Requirements for the Occupational Skills Certificate: (11 units)

AUTO 200 – Automotive Fundamentals for Technicians (4)

AUTO 206A – Basic Automotive Electrical Systems (4)

AUTO 207 – Automotive Heating & Air Conditioning (3)

Automotive Technology – Powertrain Technician – Associate in Science Degree, Certificate of Achievement

Top Code: 0948.00

The curriculum prepares students for entry-level employment in transmission repair. Students will gain valuable hands-on experience in removing, rebuilding, and adjusting manual and automatic transmissions and transaxles, clutches, drivelines, universal joints, constant-velocity (CV) joints, and differentials. The use of precision equipment and specialty tools is emphasized. Students are encouraged to take the Automotive Service Excellence (ASE) examinations for Automatic Transmission/Transaxle (A2) and Manual Drive Train and Axles (A3). ASE Student Certifications are administered within the program courses.

This program has lab fees, uniform and DMV requirements. This curriculum is National Technicians Education Foundation (NATEF) approved and renewed in 2016.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate the proper set up and operation of transmission diagnostic and service tools used in the automotive industry.
2. Apply automatic and manual transmission theories of operation to practical diagnostic scenarios encountered during service and repairs of automatic and manual transmissions/transaxles and drive trains.
3. Apply hands on skill sets pertaining to the National Automotive Technician Education Foundation (NATEF) standards and performance tasks for automatic and manual transmissions, transaxles, and drive trains.

Requirements for the Certificate of Achievement (18 units):

AUTO 200 – Automotive Fundamentals for Technicians (4)

AUTO 206A – Basic Automotive Electrical Systems (4)

AUTO 202 – Automatic Transmission and Transaxles (5)

AUTO 203 – Manual Transmission, Transaxle, and Drivetrain (5)

Recommended Electives

WELD 145 – Introduction to TIG Welding (1)

Requirements for the Associate in Science Degree – see page 101.

Automotive Technology – Undercar Technician – Associate in Science Degree, Certificate of Achievement

Top Code: 0948.00

The curriculum prepares students for entry-level employment in brake system service, suspension inspections and repair, and tire and wheel repair including 4 wheel alignment. Systems of both foreign and domestic vehicles and a wide variety of vehicle models are covered. Antilock brake systems (ABS) are discussed and service procedures are demonstrated. The use of precision equipment such as computerized alignment machines, brake disc and drum lathes, and diagnostic scan tools keep students current with the latest industry standards. All applicable machining procedures and technical calculations are covered. Students are encouraged to take the Automotive Service Excellence (ASE) exams for Suspension and Steering (A4), and Brakes (A5). ASE Student Certification Examinations are administered within the program courses.

This program requires a lab fee, program uniform, and a valid driver's license. Tools are provided and are not required for the program.

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Apply a practical diagnosis, service, maintenance, and repair based on theory and operation of automotive brakes, suspension, and steering systems.
2. Demonstrate the safe set up and operation of automotive brakes, suspension, and steering system tools and equipment required by the automotive industry.
3. Perform NATEF laboratory tasks in an acceptable amount of time in a safe and consistent manner.

Requirements for the Certificate of Achievement (18 units):

Recommended sequence:

AUTO 200 – Automotive Fundamentals for Technicians (4)

AUTO 204 – Automotive Suspension & Steering (6)

AUTO 205 – Automotive Brake Systems (4)

AUTO 206A – Basic Automotive Electrical Systems (4)

Requirements for the Associate in Science Degree – see page 101.

Automotive Technology – Underhood Technician – Certificate of Achievement

Top Code: 0948.00

The curriculum prepares the student for entry-level employment as a lube technician, entry level mechanic, or fleet repair technician in an automotive engine repair facility. Students will gain valuable hands-on experience with basic diagnostic tools and procedures. Engine diagnosis testing will also cover the oiling, fuel, cooling, intake, and exhaust systems. Use of precision measuring equipment is practiced. Students are encouraged to take the Automotive Service Excellence (ASE) Exam for Engine Repair (A1). ASE Student Examinations are administered within program courses.

This program has lab fees, physical requirements, program uniform, and driver's license requirements. This curriculum is National Technicians Education Foundation (NATEF) approved and renewed in 2016.

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate the proper set up and operation of engine mechanical system diagnostic tools used in the automotive industry.
2. Describe engine mechanical operating systems and control assemblies, their theories of operation, and practical diagnostic scenarios used to track failed components or systems encountered during engine repair.
3. Apply skill sets pertaining to the National Automotive Technician Education Foundation (NATEF) standards and performance tasks for automotive engine repair.

Requirements for the Certificate of Achievement (14 units):

Recommended sequence:

AUTO 200 – Automotive Fundamentals for Technicians (4)

AUTO 201 – Engine Operation & Testing (6)

AUTO 206A – Basic Automotive Electrical Systems (4)

Recommended Electives

MACH 101 – Beginning Metalworking Skills (3)
MACH 220 – Machine Shop Technology (9)
WELD 044A – Introduction to Gas Welding (1)
WELD 200C – Semi-Automatic and Gas Tungsten Welding (10)

This Certificate of Achievement is not eligible as a major for an Associate Degree.

BIOLOGICAL TECHNOLOGY **(Natural Sciences Division)**

Biological Technology – Associate in Science Degree, Certificate of Achievement

Top Code: 0430.00

The curriculum prepares students to work in entry level positions in the field of biotechnology in high-tech industry and research institutions. This is an interdisciplinary program including courses and practical training in math, chemistry, biology, computer skills, and English. Emphasis is placed on program participants developing competency for working in a laboratory environment, including; performing basic and advanced laboratory techniques; collecting, documenting, and analyzing data; and participating in short-term independent projects. Fundamental skills and workplace competencies necessary for successful employment in the biotechnology industry and in research laboratories are also emphasized.

Students are kept informed on current advances in biotechnology by guest speakers and internet assignments to access relevant technical resources and recently published scientific articles.

This program offers classroom instruction in a working laboratory setting and assistance in finding appropriate internships. Students must be willing to spend time working on long term projects and participating in outreach programs. Students must be able to provide their own transportation to an internship site.

Employment opportunities include positions in: biomedical industry, academic research institutes, pharmaceutical companies, agriculture, and food science genetic engineering laboratories.

Students who have previously completed coursework required for the Certificate of Achievement and need only the Biology 102A–D courses may take a “fast track” and complete the certificate in 1 year.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Understand, interpret and write laboratory documents, SOPs, protocols and notebook documentation.
2. Be able to use, maintain, calibrate and/or validate standard laboratory equipment.
3. Be prepared for entry level technician positions in the biological technology industry and in research laboratories.

Prerequisites:

MATH 131
CHEM 001A, 022

Recommended preparation:

Computer literacy

**Requirements for the Certificate of Achievement
(50 units):**

Recommended sequence:

Semester I

ENGL 001A – Reading and Composition (4)
BIOL 102A – Biological Technology–Basic Techniques (3)
CHEM 001B – General Chemistry and Chemical Analysis (5)
BIOL 010A – Cellular Biology, Genetics and Evolution (5)

Semester II

BIOL 102B – Biological Technology–Advanced Techniques (3)
BIOL 102C – Biological Technology–Cell Culture Techniques (3)
BIOL 010B – The Diversity of Life on Earth: Structure, Function and Ecology (5)

Semester III

CHEM 008A – Organic Chemistry (5)
MICR 002 – Microbiology (4)
 or BIOL 104B – Microbiological Applications used in Biotechnology (4)
STAT 018 – Statistics for Behavioral and Social Sciences (4)
 or STAT 050 – Elementary Statistics (4)

Semester IV

BIOL 010C – Genetics (3)
PHSC 002 – Scientific Method as Critical Thinking (3)

Summer

BIOL 102D – Biological Technology–Laboratory Internship (3)

Recommended Electives

BIOL 104A – Applications of Fluorescence Microscopy (2)
BIOL 104C – Research Methodology (3)
BIOL 104D – Collaborative Research Experience (3)

Requirements for the Associate in Science Degree – see page 101.

Biological Technology – Computational Biology – *Certificate of Achievement*

Top Code: 0430.00

Today's biotechnology companies depend on the ability of their employees to understand and use computational skills to handle large amounts of research data. This curriculum provides interdisciplinary skills required to seek employment at an entry level in performing data acquisition, management, and analysis in laboratory environments. The certificate program can also benefit working professionals seeking to advance or change their careers.

Students will learn programming, statistics, basic concepts of molecular biology, and use of bioinformatics applications and resources. The program emphasizes the skills necessary to become creative and flexible team members and leaders who can work with others in the dynamic interdisciplinary team environment found in today's biotechnology companies.

Students in the certificate program will be required to complete a programming project in the Biology 028 class.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an understanding of the fundamental concepts of molecular biology, including DNA, genes, proteins, and genomes.
2. Use online resources such as NCBI (National Center for Biotechnology Information) and bioinformatics applications to research and analyze biological data.
3. Write computer programs to perform customized analyses of biological data, using statistical measures to determine the significance of results.

Requirements for the Certificate of Achievement (16–17 units):

Recommended sequence:

Semester I

CIS 010 – Introduction to Information Systems (3)

BIOL 039 – Modern Human Genetics (4)

or BIOL 102A – Biological Technology–Basic Techniques (3)

or BIOL 102B – Biological Technology–Advanced Techniques (3)

Semester II

STAT 018 – Statistics for Behavioral and Social Sciences (4)

or STAT 050 – Elementary Statistics (4)

CIS 036 – Introduction to Visual Basic (3)

Semester III

BIOL 028 – Introduction to Bioinformatics (3)

This Certificate of Achievement is not eligible as a major for an Associate Degree.

Biological Technology – Laboratory Assistant – *Certificate of Achievement*

Top Code: 0430.00

The curriculum prepares students to work in entry level positions in the field of biotechnology where a biology or chemistry degree is not required. This is an interdisciplinary program including courses and practical training in math, chemistry, biology, computer skills and English. This program prepares students using scans guidelines. Emphasis is on practical laboratory skills combined with training in quality assurance and quality control in a working laboratory setting. Students are kept informed on current advances in biotechnology by speakers from industry, internet assignments and tours of local biotech facilities.

This program offers classroom instruction plus supervised work experience in the biotechnology industry. Students must be willing to spend time working on long term projects and participating in outreach programs.

Students must be able to provide their own transportation in the final semester to an internship site. Employment opportunities include: biomedical industry, academic research labs, pharmaceuticals, agriculture, food science labs, genetic engineering labs.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Students who have previously completed coursework required for the laboratory assistant option and need only the Biology 102A–D courses may take a “fast track” and complete the option in 1 year.

Program Outcomes:

1. Understand, interpret and write laboratory documents, SOPs protocols and notebook documentation.
2. Be able to use, maintain, calibrate and/or validate standard laboratory equipment.
3. Be prepared for entry level technician positions in the biological technology industry and in research laboratories with an emphasis in the medical environment.

Prerequisite:

MATH 125

Requirements for the Certificate of Achievement (39 units):

Recommended sequence:

Semester I

BIOL 011 – General Biology (4)
or BIOL 039 – Modern Human Genetics (4)
BIOL 102A – Biological Technology–Basic Techniques (3)
CHEM 002A – Chemistry–General, Organic and Biochemistry (4)
ENGL 001A – Reading and Composition (4)

Semester II

BIOL 102B – Biological Technology–Advanced Techniques (3)
CHEM 002B – Chemistry–General, Organic and Biochemistry (4)
PHSC 002 – Scientific Method as Critical Thinking (3)

Semester III

MICR 002 – Microbiology (4)
STAT 018 – Statistics for Behavioral and Social Sciences (4)
or STAT 050 – Elementary Statistics (4)

Semester IV

BIOL 102C – Biological Technology–Cell Culture Techniques (3)

Summer

BIOL 102D – Biological Technology–Laboratory Internship (3)

This Certificate of Achievement is not eligible as a major for an Associate Degree.

Biological Technology – Laboratory Skills – Occupational Skills Certificate

Top Code: 0430.00

The curriculum prepares students to work in entry level positions in the field of biotechnology in high-tech industry and institutions. Emphasis is on practical laboratory skills combined with training in a working laboratory setting.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Understand, interpret and write laboratory documents, SOPs, protocols and notebook documentation.
2. Be able to use, maintain, calibrate and/or validate basic laboratory equipment.
3. Be prepared for entry level technician positions in the biological technology industry and in research laboratories.

Requirement for the Occupational Skills Certificate (16 units):

Recommended Sequence:

Semester I

BIOL 102A – Biological Technology–Basic Techniques (3)

Semester II

BIOL 102B – Biological Technology–Advanced Techniques (3)

Semester III BIOL 102C – Biological Technology–Cell Culture Techniques (3)

Semester IV

BIOL 039 – Modern Human Genetics (4)

Summer

BIOL 102D – Biological Technology–Laboratory Internship (3)

Biological Technology – Stem Cell Culture – *Certificate of Achievement*

Top Code: 0430.00

The curriculum prepares students to work in entry level positions in the field of cell culture including stem cell culture. Emphasis is on practical laboratory skills combined with training in a working laboratory setting.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Understand, interpret and write laboratory documents, SOPs, protocols and notebook documentation.
2. Be able to use, maintain, calibrate and/or validate standard laboratory equipment.
3. Be prepared for entry level technician positions in laboratories performing stem cell research in the biological technology industry and in research institutes.

**Requirements for the Certificate of Achievement
(33 units):****Semester I**

BIOL 102A – Biological Technology–Basic Techniques (3)

CHEM 022 – Introductory Chemistry (4)

MATH 131 – Intermediate Algebra (4)

Semester II

BIOL 102B – Biological Technology–Advanced Techniques (3)

CHEM 001A – General Chemistry and Chemical Analysis (5)

Semester III

BIOL 002 – Animal Biology (4)

or MICR 002 – Microbiology (4)

BIOL 102C – Biological Technology–Cell Culture Techniques (3)

Semester IV

BIOL 038 – Cell and Molecular Biology (4)

BIOL 102D – Biological Technology–Laboratory Internship (3)

This Certificate of Achievement is not eligible as a major for an Associate Degree.

BUILDING CONSTRUCTION **(Engineering & Technology Division)**

Building Construction – Associate in Science Degree, Certificate of Achievement

Top Code: 0952.00

The curriculum prepares students for working in the construction industry. The program qualifies graduates to seek employment as apprentice carpenters and journey-level carpenters. Students may also complete at least two years' experience which can be applied towards the required four years' experience needed to qualify for a Class "B" State of California Contractors License.

Instruction is offered in all phases of construction from demolition of an existing structure to grading of land to, ultimately, a turn-key situation. Studies include safety, materials of construction, mathematics, print reading, builders level and transit, site work, foundation and floors, rough framing, roof framing, stair building, exterior finish, and interior finish.

Additional studies included are timber construction, steel stud construction, grading of land, plumbing, HVAC, and various other specialty items that vary from project to project. The culminating student experience is the building of a single family dwelling.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Identify the training/educational requirements and describe the role of the apprentice carpenter.
2. Demonstrate the safe practices in the shop and on the job site and the safe/proper use of hand and power tools used in construction.
3. Interpret trade technical calculations using addition, subtraction, multiplication, and division for estimating material take-off costs.
4. Explain the importance of measuring tools and their use in calculating building layout and estimation of materials used for construction.
5. Describe and explain residential print reading and interpret the use of the related local and international building codes used for construction.
6. Demonstrate the skills of an apprentice carpenter in the construction field to build a single-family residence from foundation to roofing including framing, plumbing, heating and air conditioning, stairs, windows, doors and the application of interior and exterior finish.

Requirements for the Certificate of Achievement (40 units):

Recommended sequence:

Semester I

BLDG 230A – Building Construction (10)

Semester II

BLDG 230B – Building Construction (10)

Semester III

BLDG 230C – Building Construction (10)

Semester IV

BLDG 230D – Building Construction (10)

Recommended Electives

ARCH 014 – Materials and Processes of Construction (2)

BLDG 122 – Contractor's Licensing (3)

BLDG 210A – Building Construction (5)

BLDG 210B – Building Construction (5)

BLDG 212 – Print Reading for Construction (3)

BLDG 213 – Building Construction Codes and Standards (3)

BLDG 214 – Materials & Processes of Const: Sub Grade to Floor Framing (3)

BLDG 215 – Materials & Methods of Const: Floor through Roof Framing (3)

BLDG 218 – Inspection of Architectural Details (3)

BLDG 220 – Estimating for Building Construction (3)

BLDG 221 – Elements of Grading Inspection (3)

BLDG 222 – Principles of Housing and Zoning Requirements (3)

BLDG 223 – Principles of Plumbing Inspection (3)

BLDG 224 – Principles of Heating and Refrigeration Inspections (3)

TECH 107A – Technical Calculations (3)

Requirements for the Associate in Science Degree – see page 101.

Cabinetmaking and Millwork – Occupational Skills Certificate

Top Code: 0952.00

The curriculum prepares students for working in the construction industry in cabinetmaking and millwork. The program qualifies graduates to seek employment as an apprentice cabinetmaker and finish carpenter and journey-level cabinetmaker and finish carpenter. Students may also complete at least two (2) additional years experience which all related work can be applied towards the required four (4) years needed to qualify for a C-6 State of California Contractors License.

Instruction is offered in cabinetmaking, cabinet installation and millwork. Studies include safety in hand, pneumatic and power tools in the shop and on the jobsite, materials and take-off list, mathematics, print reading, cutting list, and cabinet assembly.

Additional studies included are cabinet finishing and installation, interior door installation, molding making, and installation and estimating. The culminating student experience is the fabrication of cabinets and millwork and their installation in the residential home project.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Interpret a complete set of prints for cabinet layout and cabinet construction.
2. Practice safe construction techniques in both the shop and jobsite according to OSHA standards.
3. Demonstrate the proper sequence of cabinet construction and millwork.

Requirements for the Occupational Skills Certificate (14 units):

BLDG 152A – Cabinetmaking for the Student Built Home Construction (4)
BLDG 152B – Cabinet Installation & Millwork for Home Construction (4)
BLDG 212 – Print Reading for Construction (3)
BLDG 220 – Estimating for Building Construction (3)

Recommended Electives

BLDG 210A – Building Construction (5)
BLDG 230A – Building Construction (10)
TECH 107A – Technical Calculations (3)

Construction Inspection – Associate in Science Degree, Certificate of Achievement

Top Code: 0957.20

The curriculum prepares students to seek employment as construction inspectors. The focus is on the responsibility and duties of construction inspectors to verify that construction projects comply with the architect's plans, local, state and international code requirements. Instruction is offered in all phases of inspections, from pre-grading and site preparation to the buildings' final inspection. Upon completion, students can apply to become Assistant Inspectors. Students with qualifying field experience can apply to become full inspectors.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Identify the training/educational requirements and describe the role of the construction inspector.
2. Describe and explain residential print reading and interpret the use of related local, state and international building codes used for construction.
3. Explain the purpose and intent of the building, grading, mechanical, HVAC, plumbing, zoning, electrical, legal requirements and the code enforcement process.
4. Understand the methods, materials and the process of construction inspections from site preparation to the final building inspection.

Requirements for the Certificate of Achievement (32 units):

Recommended sequence:

BLDG 212 – Print Reading for Construction (3)
BLDG 213 – Building Construction Codes and Standards (3)
BLDG 214 – Materials & Processes of Const: Sub Grade to Floor Framing (3)
BLDG 215 – Materials & Methods of Const: Floor through Roof Framing (3)
BLDG 219 – Legal Factors of Construction Inspection (3)
BLDG 221 – Elements of Grading Inspection (3)
BLDG 222 – Principles of Housing and Zoning Requirements (3)
BLDG 223 – Principles of Plumbing Inspection (3)
BLDG 224 – Principles of Heating and Refrigeration Inspections (3)
ELTY 217 – Electrical Inspection and Codes (2)
TECH 107A – Technical Calculations (3)

Recommended Electives

FIRE 142 – Building Construction for Fire Protection (3)

Requirements for the Associate in Science Degree – see page 101.

Construction Law – Occupational Skills Certificate

Top Code: 0952.00

Details in the areas of construction law, printreading and estimating. Legal and contractual aspects of the construction industry including California contractors' license law, business ethics, lien laws, health and safety regulations, workers' compensation, employment insurance and taxes. Also residential and commercial printreading and estimating.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Interpret the legal and contractual aspects of the construction industry.
2. Compare the difference of construction laws versus contractor's license laws.

Requirements for the Occupational Skills Certificate (9 units):

BLDG 122 – Contractor's Licensing (3)

BLDG 212 – Print Reading for Construction (3)

BLDG 220 – Estimating For Building Construction (3)

Recommended Electives

TECH 107A – Technical Calculations (3)

BUSINESS ADMINISTRATION (Business Division)

Business – Associate in Arts Degree

Top Code: 0505.00

This area of emphasis is primarily intended to prepare students to transfer to a university and earn a bachelor's degree in Business Administration. The study of Business gives the student an understanding of the social and economic environment in which we live and provides a common body of knowledge for all students who specialize in any business field. It is the purpose of this area of emphasis to develop in students the interpersonal, technical, and managerial competence necessary for successful performance in business, industry, government, and education. Students who choose this field of study will accomplish several objectives. The first of these is to prepare for lifelong professional careers in commerce, finance and industry, as well as for management careers in the public and non-profit sectors. A second objective is to provide students with the knowledge and skills needed to obtain professional, entry level positions in one or another functional area of the business enterprise, or in some particular field of business. The primary objective, however, is transfer in the field of Business Administration. Specialized options in a bachelors' degree program such as accounting, finance, entrepreneurship, information systems, and other specializations are widely available in CSU, UC, and private schools.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate a productive working knowledge of the basic functions of a business enterprise, including: accounting, entrepreneurship, economics, business law, finance, human resource management, ethics and marketing.
2. Demonstrate an understanding of the communication process in a business and professional setting, including: written, oral, non-verbal, electronic communication, and active listening.

**Requirements for the area of emphasis
(18 units minimum)**

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete at least 18 units chosen from the courses listed below:

ACCT 001A – Financial Accounting (5)
ACCT 001B – Managerial Accounting (4)
ACCT 010 – Bookkeeping–Accounting (4)
BIT 025 – Survey of Computer Technology in Business (3)
 or CIS 001 – Introduction to Computers (3)
 or CIS 010 – Introduction to Information Systems (3)
BUS 002 – Personal Finance (3)
BUS 009 – Introduction to Business (3)
BUS 010 – Introduction to Management (3)
BUS 011A – Business Communications (3)
BUS 012A – Business Law (3)
BUS 012B – Business Law Transactions & Organizations (3)
BUS 014A – Mathematical Analysis for Business–Finite (4)
BUS 014B – Mathematical Analysis for Business–Calculus (4)
BUS 016 – Business Computations Utilizing Technology (3)
ECON 001A – Principles of Economics (3)
ECON 001B – Principles of Economics (3)
MATH 005A – Single Variable Calculus I (5)
STAT 015 – Statistics for Business and Economics (4)
 or STAT 050 – Elementary Statistics (4)

Requirements for the Associate in Arts Degree – see page 97.

Business Administration – Associate in Science Degree for Transfer to CSU

Top Code: 0505.00

This program provides an opportunity for students to earn an Associate in Science in Business Administration for Transfer while preparing to transfer as an upper division student to a four-year college or university. For those students considering a career in business, a baccalaureate degree is necessary. However, the attainment of an Associate in Science in Business Administration for Transfer will demonstrate commitment to the field and the student's ability to complete an educational goal. An Associate in Science in Business Administration for Transfer is awarded for satisfactory performance in major courses, as well as completion of general education and graduation requirements

In doing so, students will acquire the knowledge and skills necessary to transfer to an upper-division Business program at a California State University. Given the uniqueness of each CSU campus, completion of the Associate in Science in Business Administration for Transfer will also prepare students for the various options under business administration such as; Business Law, Management, Accounting, Finance, and Marketing to name a few.

The Associate in Science in Business Administration for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units. The degree requirements include the 27–29 major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better. (Students completing this degree are not required to fulfill additional PCC graduation requirements.)

Program Outcomes:

1. Demonstrate a productive working knowledge of the basic functions of a business enterprise, including: accounting, entrepreneurship, economics, business law, finance, human resource management, ethics and marketing.
2. Demonstrate an understanding of the communication process in a business and professional setting, including: written, oral, non-verbal, electronic, and active listening.

Associate in Science in Business Administration for Transfer Degree

Required Courses (18 Units)

- ACCT 001A – Financial Accounting (5)
- ACCT 001B – Managerial Accounting (4)
- BUS 012A – Business Law (3)
- ECON 001A – Principles of Economics (3)
- ECON 001B – Principles of Economics (3)

LIST A: Select One Course from Below (4 Units)

- BUS 014A – Mathematical Analysis for Business–Finite (4)
- BUS 014B – Mathematical Analysis for Business–Calculus (4)
- STAT 015 – Statistics for Business and Economics (4)
- or STAT 050 – Elementary Statistics (4)

LIST B: Select 2 Courses From Below or Any Course From List A Not Already Used (6 Units)

- BIT 025 – Survey of Computer Technology in Business (3)
- or CIS 001 – Introduction to Computers (3)
- or CIS 010 – Introduction to Information Systems (3)
- BUS 009 – Introduction to Business (3)
- or BUS 011A – Business Communications (3)

REQUIRED SUBTOTAL	27–29
CSU General Education or IGETC CSU Pattern.....	37–39
Transferable Electives (as needed to reach 60 transferable units)	
DEGREE TOTAL	60

Customer Service – Occupational Skills Certificate

Top Code: 0509.00

The curriculum prepares students to work with diverse groups of customers, responding to them with courtesy and tact. Emphasis on customer skills, effective oral and written communication, interpersonal skills, workplace attitude and conduct, stress and time management, conflict resolution, business etiquette, and problem solving.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Write effective Business letters and memos. Give clear concise oral presentations.
2. Identify the customer service factors involved in obtaining customer goodwill, enhancing the company image and communicating with customers.
3. Demonstrate knowledge of the elements necessary in establishing a successful customer service program.

Requirements for the Occupational Skills Certificate (12 units):

BIT 025 – Survey of Computer Technology in Business (3)
BUS 009 – Introduction to Business (3)
BUS 011A – Business Communications (3)
 or BUS 112 – Business English (3)
BUS 160 – Customer Service (3)

Business Administration – Entrepreneurship – Occupational Skills Certificate

Top Code: 0506.40

This curriculum focuses on the mindset of an entrepreneur and valuable traits that lead to the successful launch and running of a business. This Certificate program will expose students to a process that strengthens their innovative and creative capacities, and that enables them to apply these attributes to whatever they pursue: starting a business or nonprofit or standing out as an entrepreneurial employee inside a company.

Instruction includes all aspects of critical thinking, creative thinking, problem-solving, innovation, empowerment, personal finance, general business, marketing, and management.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Discuss the major influences on businesses and on starting and building businesses, including governmental, financial, human resource, law, global, technology and other considerations.
2. Describe entrepreneurial risks, problems, and opportunities.
3. Describe the proposed market segment and value that's being created.
4. Evaluate personal budget for reaching financial goals.
5. Demonstrate entrepreneurial attitudes, behaviors, and skills.

Requirements for the certificate (9 units):

BUS 002 – Personal Finance (3)
BUS 009 – Introduction to Business (3)
BUS 116 – Entrepreneurship (3)

Recommended Electives

MRKT 020 – Principles of Marketing (3)
ACCT 001A – Financial Accounting (5)
BUS 160 – Sales and Customer Service (3)
BUS 016 – Business Computations Using Technology (3)
BUS 011A – Business Communications (3)
BUS 010 – Introduction to Management (3)
BUS 012A – Business Law (3)
BUS 014A – Mathematical Analysis for Business–Finite (4)

Business Administration – Entrepreneurship and Small Business Management – Associate in Science Degree, Certificate of Achievement
Top Code: 0506.40

The Certificate of Achievement in Entrepreneurship and Small Business Management is designed to cultivate the innovative, entrepreneurial skills necessary for today's fast-paced, continuously changing business environment. Students will learn how to think and act flexibly, creatively, and critically. This Certificate provides students of any discipline with the tools and skills required to organize and plan their own business or to innovate within an organization.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Design and develop a strategic business and marketing plan that can be used to prepare a new business launch, to achieve entry into new markets, or to change and grow an existing business.
2. Evaluate how business concepts such as brand building, financial management, business law, resource allocations, and change and uncertainty for competitive advantage affect the growth of a small business.
3. Apply quantitative reasoning to common business problems, including markup, markdown, simple and compound interest, payroll, and discounts.
4. Apply the business skills of planning, managing, financing, and marketing to create a new venture or help lead an existing business to think with a higher degree of innovation.
5. Analyze self-motivation, roles, creative abilities, and communication skills in the context of the entrepreneurial mindset.

Requirements for the certificate (22–24 units):

BIT 025 – Survey of Computer Technology in Business (3)
BUS 002 – Personal Finance (3)
BUS 012A – Business Law (3)
BUS 009 – Introduction to Business (3)
ACCT 001A – Financial Accounting (5)
 or ACCT 010 – Bookkeeping–Accounting (4)
BUS 116 – Entrepreneurship (3)

Required Electives: Select one class of at least 3 units

BUS 010 – Introduction to Management (3)
BUS 112 – Business English (3)
BUS 117 – Human Relations/Organizational Behavior (3)
BUS 160 – Sales and Customer Service (3)
BUS 014A – Mathematical Analysis for Business–Finite (4)
BUS 016 – Business Computations Using Technology (3)
MRKT 020 – Principles of Marketing (3)
MRKT 150 – Social Media Marketing for Business (3)

Requirements for the Associate in Science Degree – see page 101.

Business Administration – Financial Investments – *Associate in Science Degree, Certificate of Achievement*

Top Code: 0504.00

The curriculum prepares students for careers in investment banks, stock brokerage firms, insurance companies, and firms providing financial advice in buying and selling of stocks, bonds, or shares in mutual funds.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Identify the various ways by which business enterprises are financed. Explain the legal elements of financing a business.
2. Write effective Business correspondence.
3. Achieve mastery and confidence working with whole numbers, fractions, and percents and use these skills in everyday business transactions.
4. Describe financial controls that may be used to keep a business successful.
5. Use computers to collaborate with others to solve business problems.

Requirements for the certificate (25–27 units):

Recommended sequence:

ACCT 010 – Bookkeeping–Accounting (4)
 or ACCT 001A – Financial Accounting (5)
BIT 025 – Survey of Computer Technology in Business (3)
BUS 002 – Personal Finance (3)
BUS 009 – Introduction to Business (3)
 or BUS 010 – Introduction to Management (3)
BUS 011A – Business Communications (3)
BUS 014A – Mathematical Analysis for Business–Finite (4)
 or BUS 016 – Business Computations Utilizing Technology (3)
 or STAT 015 – Statistics for Business and Economics (4)
BUS 118 – Investments (3)
BUS 160 – Sales and Customer Service (3)

Recommended Electives

ACCT 104A – Computerized Accounting–Quickbooks (3)

Requirements for the Associate in Science Degree – see page 101.

Business Administration – International Business/Trade – *Associate in Science Degree, Certificate of Achievement*

Top Code: 0508.00

The curriculum prepares students for competing in the international global marketplace. Emphasis is on importing, exporting and establishing an overseas business presence. This curriculum is designed for the individual international entrepreneur, as well as the established company executive.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Compare and contrast international and domestic business.
2. Write effective business correspondence, and give clear, concise oral presentations.
3. Achieve confidence working with whole numbers, fractions, and percents and apply them to common business problems such as markup, markdown, simple and compound interest, payroll, discounts, etc.
4. Identify and apply the major components needed to perform a country analysis.
5. Perform simple foreign exchange calculations to determine the cost of foreign products and the book value of foreign companies.

Requirements for the certificate (22–24 units):

Recommended sequence:

ACCT 001A – Financial Accounting (5)

or ACCT 010 – Bookkeeping–Accounting (4)

BIT 025 – Survey of Computer Technology in Business (3)

BUS 002 – Personal Finance (3)

BUS 009 – Introduction to Business (3)

BUS 011A – Business Communications (3)

BUS 016 – Business Computations Utilizing Technology (3)

or BUS 014A – Mathematical Analysis for Business–Finite (4)

or STAT 015 – Statistics for Business and Economics (4)

BUS 150 – Survey of International Business (3)

or BUS 151 – International Marketing (3)

or BUS 152 – Principles of Importing and Exporting (3)

Recommended Electives

BUS 116 – Small Business Management (3)

BUS 160 – Customer Service (3)

Requirements for the Associate in Science Degree – see page 101.

Business Administration – Management – Associate in Science Degree, Certificate of Achievement
Top Code: 0506.30

The curriculum prepares students to seek employment as managers or supervisors in medium or large corporations, emphasizing leadership skills. The business supervisor coordinates the operation, production, distribution and sales divisions within an organization by planning, organizing, directing, controlling resources and executing administrative policies through support personnel.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Compare and contrast international and domestic business.
2. Write effective business correspondence, and give clear, concise oral presentations.
3. Research and analyze management and leadership issues and provide solutions.
4. Demonstrate the ability to work cooperatively with others.

Requirements for the certificate (27–29 units):

Recommended sequence:

ACCT 001A – Financial Accounting (5)
 or ACCT 010 – Bookkeeping–Accounting (4)
BIT 025 – Survey of Computer Technology in Business (3)
BUS 002 – Personal Finance (3)
BUS 009 – Introduction to Business (3)
BUS 011A – Business Communications (3)
BUS 010 – Introduction to Management (3)
 or BUS 128 – Human Resources Management (3)
BUS 016 – Business Computations Utilizing Technology (3)
 or STAT 015 – Statistics for Business and Economics (4)
 or BUS 014A – Mathematical Analysis for Business–Finite (4)
BUS 160 – Sales and Customer Service (3)
 or BUS 117 – Human Relations/Organizational Behavior (3)
BUS 161 – Applied Business Principles and Practices (2)

Recommended Electives

MRKT 020 – Principles of Marketing (3)

Requirements for the Associate in Science Degree – see page 101.

Business Administration – Marketing Management – Associate in Science Degree, Certificate of Achievement

Top Code: 0509.00

The Marketing Management program provides students with core skills for employment in sales, marketing management, marketing research, promotions and customer service. Students will complete course work that emphasizes customer segmentation, marketing plans, marketing research, consumer behavior, social media marketing, and marketing communication. This program is designed for entry level career paths in Marketing Management, Advertising and Promotions, Marketing Analysts, Market Researcher, Social Media Coordinator, and Sales.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Develop a marketing plan tailored for a specific target market.
2. Analyze an organization's strengths, weaknesses, opportunities and threats from a marketing perspective.
3. Explain the environmental factors which influence consumer and organizational decision making.
4. Identify the ethical challenges that companies face in marketing a brand.

Requirements for the certificate (21 units):

BUS 009 – Introduction to Business (3)
BUS 117 – Human Relations/Organizational Behavior (3)
BUS 160 – Sales and Customer Service (3)
MRKT 020 – Principles of Marketing (3)
MRKT 123 – Promotions and Marketing Communications (3)
MRKT 150 – Social Media Marketing for Business (3)
MRKT 132 – Retail Management (3)

Recommended Electives

BIT 025 – Survey of Computer Technology in Business (3)

Requirements for the Associate in Science Degree – see page 101.

Business Administration – Retail Management – Associate in Science Degree, Certificate of Achievement

Top Code: 0506.50

The curriculum prepares students for marketing careers in the retail industry in market research, promotion, advertising, distribution and pricing. Curriculum was developed in cooperation with the Western Association of Food Chains (WAFC), and is a nationally-recognized certificate.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Analyze the customer service factors involved in obtaining customer goodwill, enhancing the company image and communicating with customers.
2. Write effective business correspondence, and give clear, concise oral presentations.
3. Achieve confidence working with whole numbers, fractions, and percentages and applying them to common business problems such as markup, markdown, simple and compound interest, payroll, discounts, etc.
4. Identify the five mental stages of a sale.
5. Write a features-and-benefits analysis on a product.

Requirements for the certificate (25–26 units):

ACCT 001A – Financial Accounting (5)
or ACCT 010 – Bookkeeping–Accounting (4)
BIT 025 – Survey of Computer Technology in Business (3)
BUS 010 – Introduction to Management (3)
BUS 011A – Business Communications (3)
BUS 117 – Human Relations/Organizational Behavior (3)
BUS 128 – Human Resources Management (3)
MRKT 020 – Principles of Marketing (3)
MRKT 132 – Retail Management (3)

Requirements for the Associate in Science Degree – see page 101.

**BUSINESS INFORMATION TECHNOLOGY
(Business Division)****Business Information Technology – Administrative Assistant – Associate in Science Degree, Certificate of Achievement**

Top Code: 0514.00

The curriculum prepares students for business positions such as administrative assistant, secretary, executive assistant, and office assistant. Employees in these types of positions perform a variety of administrative tasks including document

processing, using computer applications such as presentation graphics and spreadsheets, scheduling appointments, researching and organizing information, and arranging meetings and travel.

Upon successful completion of this certificate, students will be prepared to take the Microsoft Office Specialist (MOS) certification exams in Word, Outlook, and Excel.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Develop work habits to function as a team member with people of diverse experiences and backgrounds in a workplace environment.
2. Apply standard business English to oral and written communications in support of a business office, including the production and design of complex electronic and paper-based correspondence and documents.
3. Determine appropriate information technology tools to access, manage, integrate, and create information.
4. Formulate solutions to business problems by using the Internet, current and emerging computer applications, records management, and standard business procedures.
5. Demonstrate self-management and self-awareness in terms of workplace responsibility and productivity.
6. Demonstrate the ability to competently use a wide variety of office systems, including computers, web-based workspaces, and video conferencing.

Requirements for the Certificate of Achievement (26 units):

Recommended sequence:

Semester I

BIT 011 – Business Document Processing (2)
BIT 025 – Survey of Computer Technology in Business (3)
BIT 107 – Business Software–Windows (1)
BUS 009 – Introduction to Business (3)

Semester II

BIT 106 – Business Software–Introduction to Microsoft Office System (3)
BIT 108 – Microsoft Outlook and Productivity Tools (1)
BIT 115 – Business Records Skills (1)
BIT 122 – Internet Research for Business (1)
BUS 112 – Business English (3)

Semester III

BIT 117 – Collaborative Web-Based Workspaces (1)
BIT 124 – Administrative Business Procedures (3)
BIT 128 – Business Software–Microsoft Word (2)
BIT 133 – Business Software–Microsoft Excel (2)

Recommended Electives

BIT 105 – Business Software–Microsoft Access (2)
BIT 109 – Business Software–Microsoft PowerPoint (2)

Requirements for the Associate in Science Degree – see page 101.

Business Information Technology – Business Information Worker – Associate in Science Degree, Certificate of Achievement

Top Code: 0514.00

The curriculum prepares students to work in a variety of office environments by acquiring a broad range of entry-level office skills and applications. With a solid foundation in Microsoft Windows and Office as well as strong digital and web literacy skills, the Business Information Worker brings efficiency and productivity to the workplace.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. In an enterprise environment, create, manage, and store data on collaborative web sites.
2. In an enterprise environment, use business computer software to perform common tasks.
3. Communicate with customers, employees, and other individuals to disseminate or explain information.
4. Demonstrate critical thinking, problem solving, and professional interpersonal skills in the workplace.

Requirements for the Certificate of Achievement (26 units):

Recommended sequence:

Semester I

BIT 011 – Business Document Processing (2)
BIT 025 – Survey of Computer Technology in Business (3)
BIT 106 – Business Software–Introduction to Microsoft Office System (3)
BIT 107 – Business Software–Windows (1)
ENGL 001A – Reading and Composition (4)

Semester II

BIT 108 – Microsoft Outlook and Productivity Tools (1)
BIT 115 – Business Records Skills (1)
BIT 122 – Internet Research for Business (1)
BIT 128 – Business Software–Microsoft Word (2)
BIT 133 – Business Software–Microsoft Excel (2)
BUS 011A – Business Communications (3)
BUS 160 – Customer Service (3)

Requirements for the Associate in Science Degree – see page 101.

Business Information Technology – Business Information Worker II – Associate in Science Degree, Certificate of Achievement

Top Code: 0514.00

The Business Information Worker II Certificate of Achievement provides students with skills in records management, collaboration software, presentation software, and QuickBooks. This secondary stage in the BIW pathway increases students' value and opportunities in multiple occupations, including but not limited to: office, business and executive administrative support, office supervision/coordination, small business support, retail sales, customer service and marketing support. Students completing this certificate will be equipped to take multiple Microsoft Office Specialist credential exams and become a QuickBooks certified user.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Develop a solution to a business problem using the most appropriate business application software.
2. Apply software tools to function effectively as a team member using collaborative web-based work spaces.
3. Construct business presentations that are accurate, well-organized, and are appropriate to the audience and purpose.
4. Develop accurate accounting reports using appropriate spreadsheet and accounting software.
5. Organize customer service tasks using customer relationship management software.

Requirements for the Certificate of Achievement (19 units):

ACCT 104A – Computerized Accounting – QuickBooks (3)
ACCT 010 – Bookkeeping–Accounting (4)
BIT 105 – Business Software–Microsoft Access (2)
BIT 109 – Business Software–Microsoft PowerPoint (2)
BIT 117 – Collaborative Web-Based Workspaces (1)
BIT 133 – Business Software–Microsoft Excel (2)
BIT 135 – Business Software – Customer Relationship Management (2)
MRKT 020 – Principles of Marketing (3)

Requirements for the Associate in Science Degree – see page 101.

**Business Information Technology – Business Software Specialist – Associate in Science Degree,
Certificate of Achievement**

Top Code: 0514.00

The curriculum prepares students to apply commonly used computer applications to business tasks; for example, word processing, spreadsheets, presentation graphics, databases, email, Internet research, and content management. Emphasis is on the use of computer systems to collaborate with others to solve business problems.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Analyze business problems to determine the best use of software applications to communicate solutions.
2. Develop creative, accurate, and professional methods for applying technology to solve business problems.
3. Employ technological tools to expedite workflow within an organization.

Requirements for the Certificate of Achievement (20 units):

BIT 011 – Business Document Processing (2)
BIT 025 – Survey of Computer Technology in Business (3)
BIT 105 – Business Software–Microsoft Access (2)
BIT 106 – Business Software–Introduction to Microsoft Office System (3)
BIT 107 – Business Software–Windows (1)
BIT 108 – Microsoft Outlook and Productivity Tools (1)
BIT 109 – Business Software–Microsoft PowerPoint (2)
BIT 117 – Collaborative Web-Based Workspaces (1)
BIT 122 – Internet Research for Business (1)

Requirements for the Associate in Science Degree – see page 101.

Business Information Technology – Office Assistant – Associate in Science Degree, Certificate of Achievement

Top Code: 0514.00

The curriculum prepares students for office positions such as receptionists, virtual receptionists, and information clerks. Employees in these types of positions respond to inquiries from the public, locate and provide information to other employees, coordinate electronic communications into and out of the office, maintain electronic calendars, monitor use of conference rooms, and look up customer information.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Perform a variety of tasks in a business office setting including document processing, greeting visitors, handling telephone calls, using computer systems, and managing business records.
2. Apply appropriate business software to complete tasks.
3. Compute, record, and proofread records and reports; review files, records and other documents to obtain information.
4. Function effectively as a team member using collaborative web-based workspaces.

Requirements for the Certificate of Achievement (18 units):

Recommended sequence:

Semester I

BIT 011 – Business Document Processing (2)
BIT 025 – Survey of Computer Technology in Business (3)
BIT 106 – Business Software–Introduction to Microsoft Office System (3)
BIT 107 – Business Software–Windows (1)

Semester II

BIT 108 – Microsoft Outlook and Productivity Tools (1)
BIT 115 – Business Records Skills (1)
BIT 117 – Collaborative Web-Based Workspaces (1)
BIT 122 – Internet Research for Business (1)
BIT 128 – Business Software–Microsoft Word (2)
BUS 112 – Business English (3)

Requirements for the Associate in Science Degree – see page 101.

CHILD DEVELOPMENT (Social Sciences Division)

Child Development - Administration - Associate in Science Degree, Certificate of Achievement

Top Code: 1305.00

The field of child development/early childhood education studies involves the study of the developmental patterns and learning theories of children from birth to age twelve. The Certificate of Achievement Child Development - Administration prepares students to supervise and mentor teachers in early care and education settings. However, it may not alone meet all requirements to be a Site Supervisor. Professionals in this field invoke the term development as a way to understand the child's growth and learning and to inform practice. The Child Development (CHDV) discipline at Pasadena City College offers a curriculum that guides students on various pathways, which may include the attainment of a Transfer Degree (wherein, they can transfer to a 4-year institution and obtain advanced degrees), or an Associate of Science Degree, and/or a Certificate of Achievement in Child Development that will lead students to immediate career opportunities working with infants, toddlers, preschoolers, and children with special needs.

Courses provide a theoretical foundation and prepare students for careers in Teaching in Early Care and Education schools such as infant, toddler, preschool, or Transitional Kindergarten (TK) programs, Elementary Schools (public or private), Before-and After-school programs, Family Child Care Homes, General Education Settings including parks and recreation programs, Medical Centers/Hospitals as a Child Life Specialist, Private Households, non-profit and governmental agencies concerned with the welfare of children, and Social and Human Service programs. Child Development coursework can also lead to work with elementary and secondary age students in a credentialed teaching position.

The Certificate of Achievement Child Development - Administration alone does not meet all the requirements for Site Supervisor; however, the Certificate of Achievement Child Development - Administration does meet the coursework requirement for the California Child Development Teacher (or Master Teacher) permit issued by the California Commission on Teacher Credentialing for employment in Public School Programs (Title 5) and for employment in community care facilities under Title 22 of the California State Department of Social Services. Additionally, a number of courses (1-99) meet General Education requirements for the Associate of Science Degree and Associate in Science for Transfer Degree. Completion of the Associate in Science for Transfer (AS-T) Degree in Early Childhood Education ensures transfer students will complete the lower division general education requirements as well as many lower division major requirements for a bachelor's degree in Child Development prior to transferring to a 4-year institution.

Requirements for the **Associate Teacher** Child Development Permit*:

Completion of 16 required core units as follows: PSYC 021, CHDV 010, CHDV 015, CHDV 020, and CHDV 013A and CHDV 013AF. Completion of these courses with a C or better must be verified by official transcripts. At least 50 days of experience in an instructional capacity, working at least three hours per day within the last two years in a child care and development program is also required.

Requirements for the **Teacher** Child Development Permit*:

Completion of the Certificate of Achievement - Administration major requirements plus 16 additional general education units as follows: at least one course each in Humanities, Social Sciences, Math and/or Science, and English. Completion of these courses with a C or better must be verified by official transcripts. 175 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required.

Requirements for the **Master Teacher** Child Development Permit*:

Completion of the Certificate of Achievement - Administration major requirements, six additional units in one area of specialization (infant-toddler, multi-cultural, math and science, early intervention, special education, language and literacy or administration), two units of Adult Supervision course work (CHDV 119), plus 16 additional general education units as follows: at least one course each in Humanities, Social Sciences, Math and/or Science, and English; completion of these courses with a C or better must be verified by official transcripts. 350 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required.

Requirements for the **Site Supervisor** Child Development Permit*:

Completion of the Certificate of Achievement - Administration major requirements, completion of an associate degree or 60 semester units, plus six additional units of course work in administration and supervision: CHDV 012A, Administration I: Programs; CHDV 012B, Administration II: Personnel and Leadership; and CHDV 119, Adult Supervision and Mentoring in Early Care and Education. Completion of these courses with a C or better must be verified by official transcripts. 350 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required. This experience must include at least 100 days of supervising adults in a child care and development program.

*Permits are issued by the California Commission on Teacher Credentialing.

*Depending on initial placement, students may be required to take additional English and ESL courses.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Explain using original written and/or oral presentations the theories and practices of the social, emotional, cognitive and physical developmental areas of young children as related to administering an early childhood education program
2. Evaluate important factors in planning an early childhood educational program while considering the issues involved with administering said program.
3. Compare and contrast the skills necessary in working with and supporting diverse family, structures, and program practices as an administrator of an early childhood education program.
4. Support developmental appropriate practices and all relevant curriculum standards at a program level in relation to meeting state curricular mandates.

Requirements for the Certificate of Achievement (39 units):

CHDV 010 – Principles and Practices of Teaching Young Children (3)

PSYC 021 – Developmental Psychology: The Child (3)

or PSYC 021H – Honors Development Psychology: The Child (3)

CHDV 013A – Practicum in Child Development – A (2)

CHDV 020 – Introduction to Curriculum Planning (3)

CHDV 015 – Child, Family and Community (3)

CHDV 013B – Practicum in Child Development – B (2)

CHDV 014 – Observation and Assessment of Young Children (3)

CHDV 016 – Health, Safety and Nutrition (3)

CHDV 013AF – Field Practice in Child Development – A (2)

CHDV 013BF – Field Practice in Child Development – B (2)

CHDV 012A – Administration I: Programs in Early Childhood (3)

CHDV 012B – Administration II: Personnel and Leadership in Early Childhood Education (3)

ENGL 100 – Reading and Writing Skills (4)

or ESL 033B – ESL Reading and Writing – Level 5 (4)

or ENGL 001A – Reading and Composition (4)

or ENGL 001AH – Honors Reading and Composition (4)

CHDV 017 – Teaching Children in a Diverse Society (3)

Recommended Electives

CHDV 119 – Child Development Adult Supervision (3)

CHDV 024A – Special Topics in Child Development – Health and Safety (2)

CHDV 024I – Special Topics in Child Development – Administration (2)

Requirements for the Associate in Science Degree – see page 101.

Child Development – Associate in Science Degree, Certificate of Achievement

Top Code: 1305.00

The field of child development/early childhood education studies involves the study of the developmental patterns and learning theories of children from birth to age twelve. Professionals in this field invoke the term development as a way to understand the child's growth and learning and to inform practice. The Child Development (CHDV) discipline at Pasadena City College offers a curriculum that guides students on various pathways, which may include the attainment of a Transfer Degree (wherein, they can transfer to a 4-year institution and obtain advanced degrees), or an Associate of Science Degree, and/or a Certificate of Achievement in Child Development that will lead students to immediate career opportunities that can work with infants, toddlers, preschoolers, children with special needs.

Courses provide a theoretical foundation and prepare students for careers in Teaching in Early Care and Education schools such as infant, toddler, preschool, or Pre-K programs, Elementary Schools (public or private), Before-and after-school program, Family Child Care Homes, General Education Settings including parks and recreation programs, Medical Centers/Hospitals as a Child Life Specialist, Private Households, non-profit and governmental agencies concerned with the welfare of children, and Social and Human Service programs. Child Development coursework can also lead to work with elementary and secondary age students in a credentialed teaching position.

The Certificate of Achievement meets the coursework requirement for the California Child Development Teacher (or Master Teacher) permit issued by the California Commission on Teacher Credentialing for employment in Public School Programs (Title 5) and for employment in community care facilities under Title 22 of the California State Department of Social Services. Additionally, a number of courses (1-99) meet General Education requirements for the Associate in Science Degree and Associate of Science-Transfer Degree. Completion of the Associate in Science in Early Childhood Education for Transfer (AS-T) ensures transfer students will complete the lower division general education requirements as well as many lower division major requirements for a bachelor's degree in Child Development prior to transferring to a CSU.

Requirements for the Associate Teacher Child Development Permit*:

Completion of 16 required core units as follows: PSYC 021, CHDV 010, CHDV 015, CHDV 020, and CHDV 013A and CHDV 013AF. Completion of these courses with a C or better must be verified by official transcripts. At least 50 days of experience in an instructional capacity, working at least three hours per day within the last two years in a child care and development program is also required.

Requirements for the Teacher Child Development Permit*:

Completion of the Certificate of Achievement Child Development major requirements plus 16 additional general education units as follows: at least one course each in Humanities, Social Sciences, Math and/or Science, and English. Completion of these courses with a C or better must be verified by official transcripts. 175 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required.

Requirements for the Master Teacher Child Development Permit*:

Completion of the Certificate of Achievement Child Development major requirements, six additional units in one area of specialization (infant-toddler, multi-cultural, math and science, early intervention, special education, language and literacy or administration), two units of Adult Supervision course work (CHDV 119), plus 16 additional general education units as follows: at least one course each in Humanities, Social Sciences, Math and/or Science, and English; completion of these courses with a C or better must be verified by official transcripts. 350 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required.

Requirements for the Site Supervisor Child Development Permit*:

Completion of the Certificate of Achievement Child Development major requirements, completion of an associate degree or 60 semester units, plus six additional units of course work in administration and supervision: CHDV 012A, Administration I: Programs; CHDV 012B, Administration II: Personnel and Leadership; and CHDV 119, Adult Supervision and Mentoring in Early Care and Education. Completion of these courses with a C or better must be verified by official transcripts. 350 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required. This experience must include at least 100 days of supervising adults in a child care and development program.

*Permits are issued by the California Commission on Teacher Credentialing.

*Depending on initial placement, students may be required to take additional English and ESL courses.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Explain using original written and/or oral presentations the ability to identify the theories and practices of the social, emotional, cognitive and physical developmental areas of young children.
2. Evaluate important factors in planning at child educational programs, and the ethical issues involved in working with young children.
3. Compare and contrast the skills necessary in working with and support diverse family, structures and program practices.
4. Support developmental appropriate practices and all relevant curriculum standards.
5. Demonstrate critical thinking skills to observe, analyze, synthesize and evaluate ideas and information.

Requirements for the Certificate of Achievement (33 units):

Recommended sequence:

Semester I

CHDV 010 – Principles and Practices of Teaching Young Children (3)

ENGL 100 – Reading and Writing Skills (4)

or ESL 033B – ESL Reading and Writing–Level 5 (4)

or ENGL 001A – Reading and Composition (4)

or ENGL 001AH – Honors Reading and Composition (4)

PSYC 021 – Developmental Psychology: The Child (3)

or PSYC 021H – Honors Development Psychology: The Child (3)

Semester II

CHDV 013A – Practicum in Child Development – A (2)

CHDV 013AF – Field Practice in Child Development – A (2)

CHDV 014 – Observation and Assessment of Young Children (3)

CHDV 020 – Introduction to Curriculum Planning (3)

Semester III

CHDV 013B – Practicum in Child Development–B (2)

CHDV 013BF – Field Practice in Child Development – B (2)

CHDV 015 – Child, Family and Community (3)

Semester IV

CHDV 016 – Health, Safety and Nutrition (3)

CHDV 017 – Teaching Children in a Diverse Society (3)

Recommended Electives

ART 006 – Art Media for Early Childhood Education (3)

CHDV 024A – Special Topics in Child Development-Health and Safety (2)

CHDV 024B – Special Topics in Child Development-Curriculum (2)

CHDV 024C – Special Topics in Child Development-The Young Child (2)

CHDV 024D – Special Topics in Child Development-Working with Parents (2)

CHDV 024E – Special Topics in Child Development-Multicultural Issues (2)

CHDV 024F – Special Topics in Child Development-Discipline (2)

CHDV 024G – Special Topics in Child Development-Environment (2)

CHDV 024I – Special Topics in Child Development-Administration (2)

Requirements for the Associate in Science Degree – see page 101.

Child Development Instructional Assistant – *Occupational Skills Certificate*

Top Code: 1305.00

The Child Development Instructional Assistant curriculum provides students with the necessary skills to seek employment as assistants in instructional programs for young children. Opportunities are available for work with children in a variety of settings including: homes, schools, and public or private agencies concerned with the development and welfare of young children. The program focuses on child psychology, curriculum planning, developmentally appropriate practices, safety, anti-bias environment, and provides practical experience. CPR, First-Aid training, TB and fingerprint clearances are required. Completion of this curriculum with a C or better grade allows the student to apply for the California Child Development permit at the Associate Teacher level.

Program Outcomes:

1. Demonstrate through original written and/or oral presentations the ability to identify the theories and practices of the social, emotional, cognitive and physical developmental areas of young children from birth to 8 years of age.
2. Demonstrate an awareness of and evaluate the important factors in planning an educational program serving young children from birth to age 8.
3. Compare and contrast the skills necessary in working with programs serving children from birth to age 8.

Requirements for the Occupational Skills Certificate (16 units):

Semester I

CHDV 010 – Principles and Practices of Teaching Young Children (3)
PSYC 021 – Developmental Psychology: The Child (3)

Semester II

CHDV 013A – Practicum in Child Development – A (2)
CHDV 013AF – Field Practice in Child Development – A (2)
CHDV 015 – Child, Family and Community (3)
CHDV 020 – Introduction to Curriculum Planning (3)

Recommended electives:

ART 006 – Art Media for Early Childhood Education (3)
CHDV 016* – Health, Safety and Nutrition (3)
CHDV 017 – Teaching Children in a Diverse Society (3)
CHDV 024A – Special Topics in Child Development–Health and Safety (2)
CHDV 024B – Special Topics in Child Development–Curriculum (2)
CHDV 024C – Special Topics in Child Development–The Young Child (2)
CHDV 024D – Special Topics in Child Development–Working with Parents (2)
CHDV 024E – Special Topics in Child Development–Multicultural Issues (2)
CHDV 024F – Special Topics in Child Development–Discipline (2)
CHDV 024G – Special Topics in Child Development–Environment (2)
CHDV 024H – Special Topics in Child Development–Administration (2)
CHDV 118 – Language and Literacy in Early Childhood (3)
EDUC 030 – Teaching as a Profession (3)
ENGL 059 – Children’s Literature (3)

KINT 027C – Early Childhood Physical Education (2)
 MUSC 030 – Music for Early Childhood Education (3)
 MUSC 130 – Music Education for Young Children (3)

*This class meets the CPR and First-Aid requirements.

Child Development - Early Childhood Education – Associate in Science Degree for Transfer to CSU

Top Code: 1305.00

Child Development is the study of the physical, socio-emotional and cognitive growth and development of the child from conception through age eight. Students completing the Child Development program pursue a wide variety of careers including infant/toddler care, preschool teaching (including Head Start), elementary and secondary education, early childhood special education, program administration, school counseling, child psychology, child advocacy, social work, and community services. Completion of the Associate in Science in Early Childhood Education for Transfer (AS-T) ensures transfer students will complete the lower division general education requirements as well as the lower division major requirements for a bachelor's degree in Child Development prior to transferring to a CSU. The Child Development Program at Pasadena City College also offers Child Development Certificates for Child Development Permits from the California Commission on Teacher Credentialing. Please visit the following link <http://www.pasadena.edu/divisions/social-sciences/chdv/> for more information.

The Associate in Arts in Child Development for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the major requirements and the Intersegmental General Education Transfer Curriculum (IGETC) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better. (Students completing this degree are not required to fulfill additional local graduation requirements)

Program Outcomes:

1. Interpret theoretical teaching practices as defined within the field of child development and education, the history, diversity, philosophies and ethical standards.
2. Identify the underlying theoretical perspective in forming a teaching and professional philosophy.
3. Integrate understanding of children's development to maintain healthy, safe, respectful, supportive, and challenging learning environments.
4. Evaluate the effectiveness of classroom teaching strategies to improve teaching practices for all children, including the application of a variety of effective approaches, strategies, and techniques supporting positive relationships.

Associate in Science in Early Childhood Education for Transfer Degree

REQUIRED COURSES (25 units)

PSYC 021 – Developmental Psychology: the Child (3)
 CHDV 010 – Principles and Practices of Teaching Young Children (3)
 CHDV 013A – Practicum in Child Development – A (2)
 CHDV 013AF – Field Practice in Child Development – A (2)
 CHDV 014 – Observation and Assessment of Young Children (3)
 CHDV 015 – Child, Family and Community (3)
 CHDV 016 – Health, Safety and Nutrition (3)
 CHDV 017 – Teaching Children in a Diverse Society (3)
 CHDV 020 – Introduction to Curriculum Planning (3)

REQUIRED SUBTOTAL..... 25
 CSU General Education or IGETC CSU Pattern.....37-39

DEGREE TOTAL 60

Child Development - Early Intervention – Associate in Science Degree, Certificate of Achievement

Top Code: 1305.00

The field of child development/early childhood education studies involves the study of the developmental patterns and learning theories of children from birth to age twelve. The study of Children with Special Needs, including Early Intervention, falls within this discipline. The Certificate of Achievement Child Development – Early Intervention prepares students to work with children with Special Needs between the ages of Birth to Three. This proposed new certificate will prepare individuals to work as early childhood paraprofessionals with expertise in special education and early intervention. The program will train students from culturally sensitive and family-focused perspectives that emphasize the value of individual differences in young children.

Professionals in this field invoke the term development as a way to understand the child's growth and learning and to inform practice. The Child Development (CHDV) discipline at Pasadena City College offers a curriculum that guides students on various pathways, which may include the attainment of a Transfer Degree (wherein, they can transfer to a 4-year institution and obtain advanced degrees), or an Associate of Science Degree, and/or a Certificate of Achievement in Child Development that will lead students to immediate career opportunities working with infants, toddlers, preschoolers, and children with special needs. Courses provide a theoretical foundation and prepare students for careers in Teaching in Early Care and Education schools such as infant, toddler, preschool, or Transitional Kindergarten (TK), Elementary Schools (public or private), Before-and after-school program, Family Child Care Homes, General Education Settings including parks and recreation programs, Medical Centers/Hospitals as a Child Life Specialist, Private Households, non-profit and governmental agencies concerned with the welfare of children, and Social and Human Service programs. Child Development coursework can also lead to work with elementary and secondary age students in a credentialed teaching position.

The Certificate of Achievement Child Development – Early Intervention meets the coursework requirement for the California Child Development Teacher (or Master Teacher) permit issued by the California Commission on Teacher Credentialing for employment in Public School Programs (Title 5) and for employment in community care facilities under Title 22 of the California State Department of Social Services. Additionally, a number of courses meet General Education requirements for the Associate in Science Degree and Associate of Science Transfer Degree. Completion of the Associate in Science for Transfer (AST) Degree in Early Childhood Education ensures transfer students will complete the lower division general education requirements as well as many of the lower division major requirements for a bachelor's degree in Child Development prior to transferring to a CSU.

Requirements for the **Associate Teacher** Child Development Permit*:

Completion of 16 required core units as follows: PSYC 021, CHDV 010, CHDV 015, CHDV 020, and CHDV 013A and CHDV 013AF. Completion of these courses with a C or better must be verified by official transcripts. At least 50 days of experience in an instructional capacity, working at least three hours per day within the last two years in a child care and development program is also required.

Requirements for the **Teacher** Child Development Permit*:

Completion of the Certificate of Achievement, Child Development – Early Intervention major requirements plus 16 additional general education units as follows: at least one course each in Humanities, Social Sciences, Math and/or Science, and English. Completion of these courses with a C or better must be verified by official transcripts. 175 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required.

Requirements for the **Master Teacher** Child Development Permit*:

Completion of the Certificate of Achievement, Child Development – Early Intervention major requirements, six additional units in one area of specialization (infant-toddler, multi-cultural, math and science, early intervention, special education, language and literacy or administration), two units of Adult Supervision course work (CHDV 119), plus 16 additional general education units as follows: at least one course each in Humanities, Social Sciences, Math and/or Science, and English; completion of these courses with a C or better must be verified by official transcripts. 350 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required. *Permits are issued by the California Commission on Teacher Credentialing.

Requirements for the **Site Supervisor** Child Development Permit*:

Completion of the Certificate of Achievement, Child Development - Early Intervention major requirements, completion of an associate degree or 60 semester units, plus six additional units of course work in administration and supervision: CHDV 012A, Administration I: Programs; CHDV 012B, Administration II: Personnel and Leadership; and CHDV 119, Adult Supervision and Mentoring in Early Care and Education. Completion of these courses with a C or better must be verified by official transcripts. 350 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required. This experience must include at least 100 days of supervising adults in a child care and development program.

*Permits are issued by the California Commission on Teacher Credentialing.

*Depending on initial placement, students may be required to take additional English and ESL courses.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Explain using original written and/or oral presentations the theories and practices of the social, emotional, cognitive, and physical developmental areas of young children from birth to three years of age identified as needing Early Intervention Services.
2. Evaluate important factors in planning a supportive child and family educational program in support of the child and family during the first 3 years of life.
3. Compare and contrast the skills necessary in working with and supporting diverse family, structures, and program practices as related to Early Intervention strategies.
4. Support developmentally appropriate practices and all relevant curriculum application in working with the children and families identified as needing Early Intervention.

Requirements for the Certificate of Achievement (47 units):

CHDV 010 – Principles and Practices of Teaching Young Children (3)

PSYC 021 – Developmental Psychology: The Child (3)

or PSYC 021H – Honors Development Psychology: The Child (3)

CHDV 013A – Practicum in Child Development – A (2)

CHDV 013AF – Field Practice in Child Development – A (2)

CHDV 020 – Introduction to Curriculum Planning (3)

CHDV 015 – Child, Family and Community (3)

CHDV 016 – Health, Safety and Nutrition (3)

CHDV 014 – Observation and Assessment of Young Children (3)

CHDV 030 – Introduction to Children with Special Needs (3)

CHDV 035 – Introduction to Curriculum and Strategies for Children with Special Needs (3)

CHDV 105 – Children with Challenging Behaviors (3)

CHDV 114 – Early Intervention (3)

CHDV 122 – Practicum in Early Intervention/Special Education (2)

CHDV 122F – Field Practice in Early Intervention/Special Education (1)

CHDV 113 – Early Intervention: Home Visiting (3)

ENGL 100 – Reading and Writing Skills (4)

or ENGL 001A – Reading and Composition (4)

or ENGL 001AH – Honors Reading and Composition (4)

or ESL 033B – ESL Reading and Writing – Level 5 (4)

CHDV 017 – Teaching Children in a Diverse Society (3)

Requirements for the Associate in Science Degree – see page 101.

Child Development - Infant/Toddler – Associate in Science Degree, Certificate of Achievement

Top Code: 1305.00

The field of child development/early childhood education involves the study of the developmental patterns and learning theories of children from birth to age twelve. Professionals in this field evoke the term development as a way to understand the child's growth and learning and to inform practice. The Child Development (CHDV) discipline at Pasadena City College offers a curriculum that guides students on various pathways, which may include the attainment of a Transfer Degree (wherein, they can transfer to a 4-year institution and obtain advanced degrees), or an Associate of Science Degree, and/or a Certificate of Achievement in Child Development that will lead students to immediate career opportunities working with infants, toddlers, and children with special needs between the age of birth to three, as well as children between the ages of 3 and 5.

Courses provide a theoretical foundation and prepare students for careers in Teaching in Early Care and Education schools such as infant and toddler programs, preschools, or Transitional Kindergarten (TK) programs, Before and After School programs, Family Child Care Homes, Medical Centers/Hospitals as a Child Life Specialist, Private Households, non-profit and governmental agencies concerned with the welfare of children, and Social and Human Service programs.

The Certificate of Achievement Child Development - Infant/Toddler meets the coursework requirement for the California Child Development Teacher permit issued by the California Commission on Teacher Credentialing for employment in Public School Programs (Title 5) and for employment in community care facilities under Title 22 of the California State Department of Social Services. Classroom experience is also mandated. Additionally, a number of courses (1-99) meet General Education requirements for the Associate of Science Degree and Associate in Science for Transfer Degree. Completion of the Associate in Science for Transfer (AS-T) Degree in Early Childhood Education ensures transfer students will complete the lower division general education requirements as well as many lower division major requirements for a bachelor's degree in Child Development prior to transferring to a CSU.

Requirements for the **Associate Teacher** Child Development Permit*:

Completion of 16 required core units as follows: PSYC 021, CHDV 010, CHDV 015, CHDV 020, and CHDV 013A and CHDV 013AF. Completion of these courses with a C or better must be verified by official transcripts. At least 50 days of experience in an instructional capacity, working at least three hours per day within the last two years in a child care and development program is also required.

Requirements for the **Teacher** Child Development Permit*:

Completion of the Certificate of Achievement Child Development - Infant/Toddler major requirements plus 16 additional general education units as follows: at least one course each in Humanities, Social Sciences, Math and/or Science, and English. Completion of these courses with a C or better must be verified by official transcripts. 175 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required.

Requirements for the **Master Teacher** Child Development Permit*:

Completion of the Certificate of Achievement Child Development - Infant/Toddler major requirements, six additional units in one area of specialization (infant-toddler, multi-cultural, math and science, early intervention, special education, language and literacy or administration), two units of Adult Supervision course work (CHDV 119), plus 16 additional general education units as follows: at least one course each in Humanities, Social Sciences, Math and/or Science, and English; completion of these courses with a C or better must be verified by official transcripts. 350 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required.

Requirements for the **Site Supervisor** Child Development Permit*:

Completion of the Certificate of Achievement Child Development - Infant/Toddler major requirements, completion of an associate degree or 60 semester units, plus six additional units of course work in administration and supervision: CHDV 012A, Administration I: Programs; CHDV 012B, Administration II: Personnel and Leadership; and CHDV 119, Adult Supervision and Mentoring in Early Care and Education. Completion of these courses with a C or better must be verified by official transcripts. 350 days of experience in an instructional capacity, working at least three hours per day within the

last four years in a child care and development program is also required. This experience must include at least 100 days of supervising adults in a child care and development program.

*Permits are issued by the California Commission on Teacher Credentialing. *Depending on initial placement, students may be required to take additional English and ESL courses.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Explain using original written and/or oral presentations the theories and practices of the social, emotional, cognitive, and physical developmental areas of typically developing young children, from birth to three years of age.
2. Evaluate important factors in planning a child educational program that supports infant and toddler development, and the ethical issues involved in working with young children and families in the first 3 years of life.
3. Compare and contrast the skills necessary in working with and supporting diverse family, structures, and program practices for infants and toddler aged children.
4. Support developmental appropriate practices and all relevant curriculum standards for infants and toddlers, utilizing California State Foundations.

Requirements for the Certificate of Achievement (39 units):

Recommended sequence:

CHDV 010 – Principles and Practices of Teaching Young Children (3)

PSYC 021 – Developmental Psychology: The Child (3)

or PSYC 021H – Honors Developmental Psychology: The Child (3)

ENGL 001A – Reading and Composition (4)

or ENGL 001AH – Honors Reading and Composition (4)

or ENGL 100 – Reading and Writing Skills (4)

or ESL 033B – ESL Reading and Writing – Level 5 (4)

Year 1

CHDV 020 – Introduction to Curriculum Planning (3)

CHDV 017 – Teaching Children in a Diverse Society (3)

CHDV 013A – Practicum in Child Development – A (2)

CHDV 013AF – Field Practice in Child Development – A (2)

CHDV 015 – Child, Family and Community (3)

CHDV 011 – Infant and Toddler Development (3)

Year II

CHDV 013B – Practicum in Child Development – B (2)

CHDV 013BF – Field Practice in Child Development – B (2)

CHDV 016 – Health, Safety and Nutrition (3)

CHDV 014 – Observation and Assessment of Young Children (3)

CHDV 022 – Infant Toddler Care and Education (3)

Recommended electives

CHDV 024C – Special Topics in Child Development – The Young Child (2)

CHDV 024F – Special Topics in Child Development – Discipline (2)

CHDV 024G – Special Topics in Child Development – Environment (2)

Requirements for the Associate in Science Degree – see page 101.

Child Development - Language & Literacy – Associate in Science Degree, Certificate of Achievement

Top Code: 1305.00

The field of child development/early childhood education studies involves the study of the developmental patterns and learning theories of children from birth to age twelve. Professionals in this field invoke the term development as a way to understand the child's growth and learning and to inform practice. The Child Development (CHDV) discipline at Pasadena City College offers a curriculum that guides students on various pathways, which may include the attainment of a Transfer Degree (wherein, they can transfer to a 4-year institution and obtain advanced degrees), or an Associate of Science Degree, and/or a Certificate of Achievement in Child Development that will lead students to immediate career opportunities working with infants, toddlers, preschoolers, school age and children with special needs. The Certificate of Achievement Child Development - Language & Literacy gives students the additional knowledge of language structure and acquisition in young children.

Courses provide a theoretical foundation and prepare students for careers in Teaching in Early Care and Education schools such as infant, toddler, preschool, or Transitional Kindergarten (TK) programs, Elementary Schools (public or private), Before-and After-school programs, Family Child Care Homes, General Education Settings including parks and recreation programs, Medical Centers/Hospitals as a Child Life Specialist, Private Households, non-profit and governmental agencies concerned with the welfare of children, and Social and Human Service programs. Child Development coursework can also lead to work with elementary and secondary age students in a credentialed teaching position.

The Certificate of Achievement Child Development - Language & Literacy meets the coursework requirement for the California Child Development Teacher permit issued by the California Commission on Teacher Credentialing for employment in Public School Programs (Title 5) and for employment in community care facilities under Title 22 of the California State Department of Social Services. Classroom experience is also mandated. Additionally, a number of courses (1-99) meet General Education requirements for the Associate of Science Degree and Associate in Science for Transfer Degree. Completion of the Associate in Science for Transfer (AS-T) Degree in Early Childhood Education ensures transfer students will complete the lower division general education requirements as well as many lower division major requirements for a bachelor's degree in Child Development prior to transferring to a CSU.

Requirements for the **Associate Teacher** Child Development Permit*:

Completion of 16 required core units as follows: PSYC 021, CHDV 010, CHDV 015, CHDV 020, and CHDV 013A and CHDV 013AF. Completion of these courses with a C or better must be verified by official transcripts. At least 50 days of experience in an instructional capacity, working at least three hours per day within the last two years in a child care and development program is also required.

Requirements for the **Teacher** Child Development Permit*:

Completion of the Certificate of Achievement Child Development - Language & Literacy major requirements plus 16 additional general education units as follows: at least one course each in Humanities, Social Sciences, Math and/or Science, and English. Completion of these courses with a C or better must be verified by official transcripts. 175 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required.

Requirements for the **Master Teacher** Child Development Permit*:

Completion of the Certificate of Achievement Child Development - Language & Literacy major requirements, completion of an associate degree or 60 semester units, plus six additional units of course work in administration and supervision: CHDV 012A, Administration I: Programs; CHDV 012B, Administration II: Personnel and Leadership; and CHDV 119, Adult Supervision and Mentoring in Early Care and Education. Completion of these courses with a C or better must be verified by official transcripts. 350 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required. This experience must include at least 100 days of supervising adults in a child care and development program.

Requirements for the **Site Supervisor** Child Development Permit*:

Completion of the Certificate of Achievement Child Development - Language & Literacy major requirements, completion of an associate degree or 60 semester units, plus six additional units of course work in administration and supervision: CHDV 012A, Administration I: Programs; CHDV 012B, Administration II: Personnel and Leadership; and CHDV 119, Adult Supervision and Mentoring in Early Care and Education. Completion of these courses with a C or better must be verified by official transcripts. 350 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required. This experience must include at least 100 days of supervising adults in a child care and development program.

*Permits are issued by the California Commission on Teacher Credentialing.

*Depending on initial placement, students may be required to take additional English and ESL courses.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Explain using original written and/or oral presentations the theories and practices of the social, emotional, cognitive, and physical areas of development in young children's linguistic evolution.
2. Evaluate important factors in planning a child educational program that supports language development for first and second/third language speakers during their initial developmental years.
3. Compare and contrast the skills necessary in working with and supporting diverse family, structures, and program practices that support a linguistically rich environment.
4. Support developmental appropriate practices and all relevant language curriculum standards.

Requirements for the Certificate of Achievement (39 units):

Recommended sequence:

Year I

CHDV 010 – Principles and Practices of Teaching Young Children (3)

PSYC 021 – Developmental Psychology: The Child (3)

or PSYC 021H – Honors Development Psychology: the Child (3)

CHDV 118 – Language and Literacy in Early Childhood (3)

ENGL 100 – Reading and Writing Skills (4)

or ENGL 001A – Reading and Composition (4)

or ENGL 001AH – Honors Reading and Composition (4)

or ESL 033B – ESL Reading and Writing – Level 5 (4)

CHDV 013A – Practicum in Child Development – A (2)

CHDV 013AF – Field Practice in Child Development – A (2)

CHDV 015 – Child, Family and Community (3)

Year II

CHDV 013B – Practicum in Child Development – B (2)

CHDV 013BF – Field Practice in Child Development – B (2)

CHDV 016 – Health, Safety and Nutrition (3)

CHDV 014 – Observation and Assessment of Young Children (3)

ENGL 059 – Children's Literature (3)

CHDV 020 – Introduction to Curriculum Planning (3)

CHDV 017 – Teaching Children in a Diverse Society (3)

Recommended Electives

CHDV 024B – Special Topics in Child Development-Curriculum (2)

Requirements for the Associate in Science Degree – see page 101.

Child Development – Multicultural Awareness – Associate in Science Degree, Certificate of Achievement

Top Code: 1305.00

The field of child development/early childhood education studies involves the study of the developmental patterns and learning theories of children from birth to age twelve. The Certificate of Achievement Child Development Multicultural Awareness gives students additional insight into the diverse students and family populations. Professionals in this field invoke the term development as a way to understand the child's growth and learning and to inform practice. The Child Development (CHDV) discipline at Pasadena City College offers a curriculum that guides students on various pathways, which may include the attainment of a Transfer Degree (wherein, they can transfer to a 4-year institution and obtain advanced degrees), or an Associate of Science Degree, and/or a Certificate of Achievement in Child Development that will lead students to immediate career opportunities that can work with infants, toddlers, preschoolers, children with special needs.

Courses provide a theoretical foundation and prepare students for careers in Teaching in Early Care and Education schools such as infant, toddler, preschool, or Transitional Kindergarten (TK) programs, Elementary Schools (public or private), Before-and After-school program, Family Child Care Homes, General Education Settings including parks and recreation programs, Medical Centers/Hospitals as a Child Life Specialist, Private Households, non-profit and governmental agencies concerned with the welfare of children, and Social and Human Service programs. Child Development coursework can also lead to work with elementary and secondary age students in a credentialed teaching position.

The Certificate of Achievement Child Development Multicultural Awareness meets the coursework requirement for the California Child Development Teacher (or Master Teacher) permit issued by the California Commission on Teacher Credentialing for employment in Public School Programs (Title 5) and for employment in community care facilities under Title 22 of the California State Department of Social Services. Additionally, a number of courses (1-99) meet General Education requirements for the Associate of Science Degree and Associate in Science for Transfer Degree. Completion of the Associate in Science for Transfer (AS-T) Degree in Early Childhood Education ensures transfer students will complete the lower division general education requirements as well as many lower division major requirements for a bachelor's degree in Child Development prior to transferring to a CSU.

Requirements for the **Associate Teacher** Child Development Permit*:

Completion of 16 required core units as follows: PSYC 021, CHDV 010, CHDV 015, CHDV 020, and CHDV 013A and CHDV 013AF. Completion of these courses with a C or better must be verified by official transcripts. At least 50 days of experience in an instructional capacity, working at least three hours per day within the last two years in a child care and development program is also required.

Requirements for the **Teacher** Child Development Permit*:

Completion of the Certificate of Achievement - Multicultural Awareness major requirements plus 16 additional general education units as follows: at least one course each in Humanities, Social Sciences, Math and/or Science, and English. Completion of these courses with a C or better must be verified by official transcripts. 175 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required.

Requirements for the **Master Teacher** Child Development Permit*:

Completion of the Certificate of Achievement - Multicultural Awareness major requirements, six additional units in one area of specialization (infant-toddler, multi-cultural, math and science, early intervention, special education, language and literacy or administration), two units of Adult Supervision course work (CHDV 119), plus 16 additional general education units as follows: at least one course each in Humanities, Social Sciences, Math and/or Science, and English; completion of these courses with a C or better must be verified by official transcripts. 350 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required.

Requirements for the **Site Supervisor** Child Development Permit*

Completion of the Certificate of Achievement - Multicultural Awareness major requirements, completion of an associate degree or 60 semester units, plus six additional units of course work in administration and supervision: CHDV 012A, Administration I: Programs; CHDV 012B, Administration II: Personnel and Leadership; and CHDV 119, Adult Supervision and Mentoring in Early Care and Education. Completion of these courses with a C or better must be verified by official transcripts. 350 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required. This experience must include at least 100 days of supervising adults in a child care and development program.

*Permits are issued by the California Commission on Teacher Credentialing.

*Depending on initial placement, students may be required to take additional English and ESL courses.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Explain using original written and/or oral presentations the ability to identify the theories and practices of the social, emotional, cognitive and physical developmental areas of young children.
2. Evaluate important factors in planning at child educational programs, and the ethical issues involved in working with young children.
3. Compare and contrast the skills necessary in working with and support diverse family, structures and program practices.
4. Support developmental appropriate practices and all relevant curriculum standards.
5. Demonstrate critical thinking skills to observe, analyze, synthesize and evaluate ideas and information.

Requirements for the Certificate of Achievement (36 units):

Year I

CHDV 010 – Principles and Practices of Teaching Young Children (3)

PSYC 021 – Developmental Psychology: The Child (3)

or PSYC 021H – Honors Developmental Psychology: The Child (3)

CHDV 013A – Practicum in Child Development – A (2)

CHDV 013AF – Field Practice in Child Development – A (2)

CHDV 015 – Child, Family and Community (3)

CHDV 017 – Teaching Children in a Diverse Society (3)

ENGL 100 – Reading and Writing Skills (4)

or ESL 033B – ESL Reading and Writing – Level 5 (4)

or ENGL 001A – Reading and Composition (4)

or ENGL 001AH – Honors Reading and Composition (4)

Year II

CHDV 013B – Practicum in Child Development – B (2)

CHDV 013BF – Field Practice in Child Development – B (2)

CHDV 014 – Observation and Assessment of Young Children (3)

CHDV 016 – Health, Safety and Nutrition (3)

CHDV 020 – Introduction to Curriculum Planning (3)

MUSC 131 – Multicultural Music Materials for Young Children (3)

Recommended Electives

CHDV 024B – Special Topics in Child Development-Curriculum (2)

CHDV 024E – Special Topics in Child Development-Multicultural Issues (2)

Requirements for the Associate in Science Degree – see page 101.

Child Development – Music & Movement Education for Young Children – *Occupational Skills Certificate*

Top Code: 1005.00

The program offers extensive hands-on training in music and movement education targeted specifically for early childhood (birth to 8 years old). Participants learn a comprehensive body of musical activities and games in four areas – singing, movement, playing instruments and listening. Students practice effective teaching techniques, explore the musical development of young children, and become acquainted with invaluable, state-of-the-art teaching materials. This certificate prepares students to teach music and movement in preschools, childcare centers, primary classrooms and private studios.

An Occupational Skills Certificate is awarded upon completion of all with a grade of C or better.

Program Outcomes:

1. Inspire and motivate students of various age groups to learn and participate in singing and other music-related activities
2. Use a comprehensive body of musical activities and games in four to five areas: Singing, Movement, Playing Instruments, Listening, and Creating.
3. Locate, recognize, and evaluate appropriate songs and musical activities, including multicultural materials, for various age-groups.
4. Describe the value and importance of music in the emotional, intellectual and physical development of young children, including brain development, creative expression, cultural literacy and community building.

Requirements for the Occupational Skills Certificate (9 units):

MUSC 030 – Music for Early Childhood Education (3)

MUSC 131 – Multicultural Music Materials for Young Children (3)

MUSC 135 – Curriculum Applications of Music in Early Childhood Education (3)

Recommended Electives

DANC 025 – Movement for Child Development (2)

KINT 027C – Early Childhood Physical Education (2)

Child Development – School Age Instructional Assistant – *Occupational Skills Certificate*

Top Code: 0802.00

The Instructional Assistant curriculum provides students with the necessary skills to seek employment working with school age children. Opportunities are available for work in a variety of settings including: parks and recreational facilities, before and after school programs, tutoring centers, public and private schools, and community agencies providing services for school age children and their families. The program focuses on child psychology, discipline techniques, curriculum planning, developmentally appropriate practices, safety, anti-bias environment, along with practical experience. CPR, First-aid training, TB and fingerprint clearances are required.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate through original written and/or oral presentations the ability to identify the theories and practices of the social, emotional, cognitive and physical developmental areas of the school age child.
2. Demonstrate an awareness of and evaluate the important factors in planning an educational program, addressing diversity, ethical issues and developmentally appropriate practices in working with the school age child.
3. Compare and contrast the skills necessary to support program practices for the school age child.

Requirements for the Occupational Skills Certificate (16 units):

Semester I

EDUC 131 – Introduction to the School-Age Child (3)

EDUC 132 – Curriculum for School-Age Children (3)

Semester II

CHDV 015 – Child, Family and Community (3)

CHDV 020 – Introduction to Curriculum Planning (3)

Semester III

CHDV 013A – Practicum in Child Development – A (2)

CHDV 013AF – Field Practice in Child Development – A (2)

Recommended electives

ART 006 – Art Media for Early Childhood Education (3)

CHDV 016 – Health, Safety and Nutrition (3)

CHDV 017 – Teaching Children in a Diverse Society (3)

CHDV 024A – Special Topics in Child Development–Health and Safety (2)

CHDV 024B – Special Topics in Child Development–Curriculum (2)

CHDV 024C – Special Topics in Child Development–The Young Child (2)

CHDV 024D – Special Topics in Child Development–Working with Parents (2)

CHDV 024E – Special Topics in Child Development–Multicultural Issues (2)

CHDV 024F – Special Topics in Child Development–Discipline (2)

CHDV 024G – Special Topics in Child Development–Environment (2)

CHDV 024I – Special Topics in Child Development–Administration (2)

CHDV 118 – Language and Literacy in Early Childhood (3)

EDUC 030 – Teaching as a Profession (3)

ENGL 059 – Children’s Literature (3)

KINT 027C – Early Childhood Physical Education (2)

MUSC 030 – Music for Early Childhood Education (3)

MUSC 130 – Music Education for Young Children (3)

Child Development - Science and Math Integration – Associate in Science Degree, Certificate of Achievement

Top Code: 1305.00

The field of child development/early childhood education studies involves the study of the developmental patterns and learning theories of children from birth to age twelve. The Certificate of Achievement Child Development Science & Math Integration prepares students to incorporate science, technology, engineering and mathematical (STEM) concepts into the classroom. Professionals in this field invoke the term development as a way to understand the child’s growth and learning and to inform practice. The Child Development (CHDV) discipline at Pasadena City College offers a curriculum that guides students on various pathways, which may include the attainment of a Transfer Degree (wherein, they can transfer to a 4-year institution and obtain advanced degrees), or an Associate of Science Degree, and/or a Certificate of Achievement in Child Development that will lead students to immediate career opportunities working with infants, toddlers, preschoolers, and children with special needs.

Courses provide a theoretical foundation and prepare students for careers in Teaching in Early Care and Education schools such as infant, toddler, preschool, or Transitional Kindergarten (TK) programs, Elementary Schools (public or private), Before-and After-school programs, Family Child Care Homes, General Education Settings including parks and recreation programs, Medical Centers/Hospitals as a Child Life Specialist, Private Households, non-profit and governmental agencies

concerned with the welfare of children, and Social and Human Service programs. Child Development coursework can also lead to work with elementary and secondary age students in a credentialed teaching position.

The Certificate of Achievement Child Development - Science & Math Integration meets the coursework requirement for the California Child Development Teacher (or Master Teacher) permit issued by the California Commission on Teacher Credentialing for employment in Public School Programs (Title 5) and for employment in community care facilities under Title 22 of the California State Department of Social Services. Additionally, a number of courses (1-99) meet General Education requirements for the Associate of Science Degree and Associate in Science for Transfer Degree. Completion of the Associate in Science for Transfer (AS-T) Degree in Early Childhood Education ensures transfer students will complete the lower division general education requirements as well as many lower division major requirements for a bachelor's degree in Child Development prior to transferring to a 4-year institution.

Requirements for the **Associate Teacher** Child Development Permit*:

Completion of 16 required core units as follows: PSYC 021, CHDV 010, CHDV 015, CHDV 020, and CHDV 013A and CHDV 013AF. Completion of these courses with a C or better must be verified by official transcripts. At least 50 days of experience in an instructional capacity, working at least three hours per day within the last two years in a child care and development program is also required.

Requirements for the **Teacher** Child Development Permit*:

Completion of the Certificate of Achievement, Child Development - Science & Math Integration major requirements plus 16 additional general education units as follows: at least one course each in Humanities, Social Sciences, Math and/or Science, and English. Completion of these courses with a C or better must be verified by official transcripts. 175 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required.

Requirements for the **Master Teacher** Child Development Permit*:

Completion of the Certificate of Achievement, Child Development - Science & Math Integration major requirements, six additional units in one area of specialization (infant-toddler, multi-cultural, math and science, early intervention, special education, language and literacy or administration), two units of Adult Supervision course work (CHDV 119), plus 16 additional general education units as follows: at least one course each in Humanities, Social Sciences, Math and/or Science, and English; completion of these courses with a C or better must be verified by official transcripts. 350 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required.

Requirements for the **Site Supervisor** Child Development Permit*:

Completion of the Certificate of Achievement, Child Development - Science & Math Integration major requirements, completion of an associate degree or 60 semester units, plus six additional units of course work in administration and supervision: CHDV 012A, Administration I: Programs; CHDV 012B, Administration II: Personnel and Leadership; and CHDV 119, Adult Supervision and Mentoring in Early Care and Education. Completion of these courses with a C or better must be verified by official transcripts. 350 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required. This experience must include at least 100 days of supervising adults in a child care and development program.

*Permits are issued by the California Commission on Teacher Credentialing.

*Depending on initial placement, students may be required to take additional English and ESL courses.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Explain using original written and/or oral presentations, the theories and practices of the social, emotional, cognitive, and physical development of young children as related to STEM conceptual processing.
2. Evaluate important factors in planning a STEM curriculum program, and the ethical issues involved in implementing this curriculum with young children.

3. Compare and contrast the skills necessary for educators in working with and supporting diverse family, structures, and program practices.
4. Support developmentally appropriate practices and all relevant curriculum standards in classroom application.

Requirements for the Certificate of Achievement (39 units):

Recommended sequence:

CHDV 010 – Principles and Practices of Teaching Young Children (3)
 PSYC 021 – Developmental Psychology: The Child (3)
 or PSYC 021H – Honors Developmental Psychology: The Child (3)
 CHDV 020 – Introduction to Curriculum Planning (3)
 CHDV 016 – Health, Safety and Nutrition (3)
 CHDV 014 – Observation and Assessment of Young Children (3)
 CHDV 013B – Practicum in Child Development – B (2)
 CHDV 013BF – Field Practice in Child Development – B (2)
 CHDV 015 – Child, Family and Community (3)
 CHDV 025A – Early Childhood Education Stem A – Mathematics (3)
 CHDV 025B – Early Childhood Stem – Science (3)
 CHDV 013A – Practicum in Child Development – A (2)
 CHDV 013AF – Field Practice in Child Development – A (2)
 CHDV 017 – Teaching Children in a Diverse Society (3)
 ESL 033B – ESL Reading and Writing – Level 5 (4)
 or ENGL 001A – Reading and Composition (4)
 or ENGL 001AH – Honors Reading and Composition (4)
 or ENGL 100 – Reading and Writing Skills (4)

Recommended Electives

CHDV 024B – Special Topics in Child Development-Curriculum (2)

Requirements for the Associate in Science Degree – see page 101.

Child Development - Special Education – *Associate in Science Degree, Certificate of Achievement*

Top Code: 1305.20

The field of child development/early childhood education studies involves the study of the developmental patterns and learning theories of children from birth to age twelve. The study of Children with Special Needs fall within this discipline. The Certificate of Achievement Child Development - Special Education prepares students to work with children with Special Needs in the 13 categorical areas as mandated by Federal Agencies.

Professionals in this field invoke the term development as a way to understand the child's growth and learning and to inform practice. The Child Development (CHDV) discipline at Pasadena City College offers a curriculum that guides students on various pathways, which may include the attainment of a Transfer Degree (wherein, they can transfer to a 4-year institution and obtain advanced degrees), or an Associate of Science Degree, and/or a Certificate of Achievement in Child Development that will lead students to immediate career opportunities working with infants, toddlers, preschoolers, and children with special needs. Courses provide a theoretical foundation and prepare students for careers in Teaching in Early Care and Education schools such as infant, toddler, preschool, or Pre-K programs, Elementary Schools (public or private), Before-and after-school programs, Family Child Care Homes, General Education Settings including parks and recreation programs, Medical Centers/Hospitals as a Child Life Specialist, Private Households, non-profit and governmental agencies concerned with the welfare of children, and Social and Human Service programs. Child Development coursework can also lead to work with elementary and secondary age students in a credentialed teaching position.

The Certificate of Achievement Child Development - Special Education meets the coursework requirement for the California Child Development Teacher (or Master Teacher) permit issued by the California Commission on Teacher Credentialing for employment in Public School Programs (Title 5) and for employment in community care facilities under Title 22 of the California State Department of Social Services. Additionally, a number of courses meet General Education requirements for the Associate in Science Degree and Associate of Science-Transfer Degree. Completion of the Associate in Science in Early Childhood Education for Transfer (AS-T) ensures transfer students will complete the lower division general education requirements as well as many of the lower division major requirements for a bachelor's degree in Child Development prior to transferring to a CSU.

Requirements for the **Associate Teacher** Child Development Permit*:

Completion of 16 required core units as follows: PSYC 021, CHDV 010, CHDV 015, CHDV 020, and CHDV 013A and CHDV 013AF. Completion of these courses with a C or better must be verified by official transcripts. At least 50 days of experience in an instructional capacity, working at least three hours per day within the last two years in a child care and development program is also required.

Requirements for the **Teacher** Child Development Permit*:

Completion of the Certificate of Achievement Child Development - Special Education major requirements plus 16 additional general education units as follows: at least one course each in Humanities, Social Sciences, Math and/or Science, and English. Completion of these courses with a C or better must be verified by official transcripts. 175 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required.

Requirements for the **Master Teacher** Child Development Permit*:

Completion of the Certificate of Achievement Child Development - Special Education major requirements, six additional units in one area of specialization (infant-toddler, multi-cultural, math and science, early intervention, special education, language and literacy or administration), two units of Adult Supervision course work (CHDV 119), plus 16 additional general education units as follows: at least one course each in Humanities, Social Sciences, Math and/or Science, and English; completion of these courses with a C or better must be verified by official transcripts. 350 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required.

Requirements for the **Site Supervisor** Child Development Permit*:

Completion of the Certificate of Achievement Child Development - Special Education major requirements, completion of an associate degree or 60 semester units, plus six additional units of course work in administration and supervision: CHDV 012A, Administration I: Programs; CHDV 012B, Administration II: Personnel and Leadership; and CHDV 119, Adult Supervision and Mentoring in Early Care and Education. Completion of these courses with a C or better must be verified by official transcripts. 350 days of experience in an instructional capacity, working at least three hours per day within the last four years in a child care and development program is also required. This experience must include at least 100 days of supervising adults in a child care and development program.

*Permits are issued by the California Commission on Teacher Credentialing.

*Depending on initial placement, students may be required to take additional English and ESL courses.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Explain using original written and/or oral presentations the theories and practices of the social, emotional, cognitive, and physical developmental areas of young children with Special Needs.
2. Evaluate important factors in planning a child education program while considering the ethical issues involved in working with young children who have been diagnosed with a mild, moderate, or severe special need.
3. Compare and contrast the skills necessary in working with and supporting diverse family, structures, and program practices as related to children with special needs.
4. Support developmentally appropriate practices and all relevant curriculum standards that support children's special needs development.

Requirements for the Certificate of Achievement (41 units):

Recommended sequence:

CHDV 010 – Principles and Practices of Teaching Young Children (3)
PSYC 021 – Developmental Psychology: The Child (3)
 or PSYC 021H – Honors Development Psychology: The Child (3)
CHDV 013A – Practicum in Child Development – A (2)
CHDV 013AF – Field Practice in Child Development – A (2)
CHDV 020 – Introduction to Curriculum Planning (3)
CHDV 015 – Child, Family and Community (3)
CHDV 016 – Health, Safety and Nutrition (3)
CHDV 014 – Observation and Assessment of Young Children (3)
CHDV 030 – Introduction to Children with Special Needs (3)
CHDV 035 – Introduction to Curriculum and Strategies for Children with Special Needs (3)
CHDV 105 – Children with Challenging Behaviors (3)
CHDV 122 – Practicum in Early Intervention/Special Education (2)
CHDV 122F – Field Practice in Early Intervention/Special Education (1)
 or ENGL 100 – Reading and Writing Skills (4)
 or ENGL 001A – Reading and Composition (4)
 or ENGL 001AH – Honors Reading and Composition (4)
 or ESL 033B – ESL Reading and Writing – Level 5 (4)
CHDV 017 – Teaching Children in a Diverse Society (3)

Recommended Electives

CHDV 024D – Special Topics in Child Development-Working with Parents (2)

Requirements for the Associate in Science Degree – see page 101.

Child Development – Special Education Assistant – *Occupational Skills Certificate*

Top Code: 0809.00

This curriculum is designed to train and place individuals within one year into a special education paraprofessional position in the public or private sector. Individuals will be provided guidance as to what type of setting would most closely match their needs and aptitudes. Settings vary significantly in the age of student served (infants, toddlers, preschoolers, elementary age, secondary age, and adults) and types of disabilities served (acquired brain injury, learning disabilities, developmental disabilities, deaf, blind, visually-impaired, severely emotionally disturbed, mobility-impaired, communication disorders, etc.). The sites also differ in their requirements for employment. Employment sites may require a high school diploma, passing of a basic skills and special education concepts test, passing of an oral interview, bilingualism, fluency in sign language, ability to lift 50 pounds, CPR and First-aid training, passing of a TB and fingerprinting test, a driver's license, a specific amount of experience working with individuals with disabilities, and clerical skills. Students would select electives, as needed, to prepare themselves for job requirements.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate through original written and/or oral presentations the ability to identify the theories and practices of the social, emotional, cognitive and physical developmental areas of young children with Special Needs.

2. Demonstrate an awareness of and evaluate the importance of planning an educational program for young children with Special Needs.
3. Compare and contrast the skills necessary in working with and supporting the diverse family and program structures.

Requirements for the Occupational Skills Certificate (15 units):

Semester I

CHDV 010 – Principles and Practices of Teaching Young Children (3)

CHDV 030 – Introduction to Children with Special Needs (3)

Semester II

CHDV 035 – Introduction to Curriculum and Strategies for Children with Special Needs (3)

CHDV 105 – Children with Challenging Behaviors (3)

CHDV 122 – Practicum in Early Intervention/Special Education (2)

CHDV 122F – Field Practice in Early Intervention/Special Education (1)

Recommended Electives

CHDV 016 – Health, Safety and Nutrition (3)

CHDV 017 – Teaching Children in a Diverse Society (3)

CHDV 113 – Early Intervention: Home Visiting (3)

CHDV 114 – Early Intervention (3)

CHDV 118 – Language and Literacy in Early Childhood (3)

EDUC 100 – Tutoring Techniques (1)

EDUC 132 – Curriculum for School-Age Children (3)

ENGL 110 – Skills for College Success (2)

PSYC 022 – Developmental Psychology: The Adult (3)

PSYC 024 – Lifespan Developmental Psychology (3)

CINEMA

(Visual Arts and Media Studies Division)

Cinema – Cinematography – Occupational Skills Certificate

Top Code: 0612.20

The curriculum prepares students for entry-level employment in motion picture camera crews for dramatic, documentary, advertising, or industrial films. The program introduces students to the responsibilities of, and skills needed for the Director of Photography, Camera Operator and Camera Assistants. Emphasis is placed on understanding cinematography as a part of a holistic approach to filmmaking.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Operate the tools of the medium.
2. Demonstrate fundamental technical knowledge and creative principles.
3. Analyze the technical qualities, cultural elements, and aesthetic values of their own and others' work.
4. Communicate effectively using a visual medium.

Requirements for the Occupational Skills Certificate (15 units):

Recommended sequence:

CINE 026A – Beginning Electronic Filmmaking (3)
CINE 026B – Intermediate Filmmaking–Electronic (3)
CINE 027 – Cinematography (3)
CINE 126 – Digital Film Narrative (3)
CINE 127 – Advanced Cinematography (3)

Recommended electives

ART 011A – Foundation Drawing (3)
ART 015 – Sketching For Design (3)
ART 057 (DMA 070) – Motion Graphics (3)
ART 085A (DMA 080) - 3-D Modeling & Sculpting (3)
 or ART 155A (DMA 080A) – 3-D Modeling and Sculpting (3)
PHOT 021 – Introduction to Black and White Photography (3)
CINE 025 – Film Art (3)
CINE 026C – Advanced Filmmaking (3)
PHOT 030 – Introduction to Digital Image Editing (3)
CINE 007A – Early Film History (3)
CINE 007B – Contemporary Film History (3)

Cinema – Cinema Production/Filmmaking – Occupational Skills Certificate

Top Code: 0612.20

The curriculum prepares students with entry-level skills to seek employment in the motion picture (cinema and other forms of media distribution) industry. The program introduces students to a broad range of knowledge and skills required to be successful in the industry. Emphasis is placed on development of creative thinking and processes alongside current professional practices.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Operate the tools of the medium.
2. Acquire fundamental technical knowledge and creative principles.
3. Demonstrate critical thinking, i.e., Recognize the technical qualities, cultural elements, and aesthetic values of their own and others' work.
4. Demonstrate ability to communicate effectively using a visual medium.

Requirements for the Occupational Skills Certificate (15 units):

Recommended sequence:

Semester I

CINE 026A – Beginning Electronic Filmmaking (3)

Semester II

CINE 026B – Intermediate Filmmaking–Electronic (3)
CINE 126 – Digital Film Narrative (3)

Semester III

CINE 026C – Advanced Filmmaking (3)

Semester IV

CINE 129 – Cinema Production Portfolio (3)

Recommended electives

ART 011A – Foundation Drawing (3)
ART 015 – Sketching for Design (3)
ART 031A – Color and Composition–Two Dimensional Design (3)
ART 032A – Design–Three Dimensional (3)
PHOT 021 – Introduction to Black and White Photography (3)
CINE 025 – Film Art (3)
PHOT 030 – Introduction to Digital Image Editing (3)
CINE 007A – Early Film History (3)
CINE 007B – Contemporary Film History (3)

COMMUNICATION STUDIES

(Performing and Communication Arts Division)

Communication Arts – Associate in Arts Degree

Top Code: 4903.00

This area of emphasis is intended to align with preparation for transfer to universities in such majors as Art, Communication, English, Journalism, Television and Radio, Theatre Arts, and other similar fields of study. Communicating well and understanding the communication process are essential to professional success in many fields. People communicate to influence, to persuade, and to express. Learning to communicate effectively is one important reason for the study of Communication Arts. Studying the communication process helps one understand how the human mind works. Analyzing the messages in advertisements, television programs, and political speeches helps one to understand our society. Studying communication in everyday relationships, groups, and organizations shows us how these systems are created and maintained. Areas of study include face-to-face interaction, group process, organizational communication, rhetoric, advocacy, intercultural communication, political communication, and performance studies. Communication Arts students can expect to develop skills essential for leadership and career development, and for understanding and interpreting events.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Read and critically analyze argumentative contexts using written and performative techniques.
2. Use relevant examples in support of a thesis.
3. Communicate using college-level grammar/syntax.
4. Demonstrate an awareness of cultural diversity and audience perceptions.

Requirements for the area of emphasis (18 units minimum)

Courses must be completed with a grade of C or better. All courses must be numbered 1–99. Students must complete 18 units with at least 3 units in three of the disciplines listed below.

Art /Design

ART 001A – History of Western Art–Prehistoric through Medieval (3)
ART 001B – History of Western Art (3)
ART 011A – Foundation Drawing (3)
ART 015 – Sketching For Design (3)
ART 016 – Perspective (3)
ART 018 – Rendering (3)
ART 024 – Printmaking–Silk Screen (3)
ART 031A – Color and Composition–Two Dimensional Design (3)

ART 031B – Color Theory (3)
ART 032A – Design–Three Dimensional (3)
ART 034A – Crafts–Materials and Processes (3)
ART 040 (DMA 010) – Introduction to Digital Arts (3)
ART 050A (DMA 020A) – Introduction to Graphic Design & Advertising (3)
ART 050B (DMA 020B) – Intermediate Graphic Design & Advertising (3)
ART 050C (DMA 020C) – Advanced Graphic Design & Advertising (3)
ART 051A (DMA 022A)– Typography–Lettering (3)
ART 051B (DMA 022B) – Typography–Application (3)
ART 052A – Introduction to Illustration (3)
ART 056 (DMA 012) – Introduction to Digital Painting & Drawing (3)
ART 052B – Advanced Illustration (3)

Communication

COMM 001 – Survey of Mass Communication (3)

English

ENGL 003 – Technical Writing–Advanced Exposition (3)
ENGL 005A – Creative Writing (3)
ENGL 005B – Creative Writing (3)
ENGL 006 – Short Story Writing (3)
ENGL 007 – Inscape Magazine Publication (3)
ENGL 008 – Writing Poetry (3)
ENGL 009 – Creative Nonfiction (3)
ENGL 010 – Introduction to Linguistics (3)
ENGL 011 – History of English Language (3)
ENGL 012 – Intercultural Communication (3)
ENGL 015 – The Research Paper (1)
ENGL 024 – A Literature in Translation (3)
ENGL 025A – Interpreting Modern Literature (3)
ENGL 025C – Women in Literature (3)
ENGL 025D – Science Fiction and Fantasy (3)
ENGL 025E – Literature of Horror (Gothic Novel) (3)
ENGL 025F – Comedy and Literature (3)
ENGL 025G – Mystery and Crime Fiction (3)
ENGL 025H – American Journeys (3)
ENGL 025I – Post-Colonial Literatures (3)
ENGL 025J – Utopian and Dystopian Literature (3)
ENGL 026 – Introduction to Literary Theory and Criticism (3)
ENGL 030A – American Literature (3)
ENGL 030B – American Literature (3)
ENGL 030C – American Literature (3)
ENGL 034 – Major Novelist (1)
ENGL 035 – Major Dramatist (1)
ENGL 036 – Major Poet (1)
ENGL 037 – Major Critic (1)
ENGL 044A – World Literature: Antiquity to 1500 (3)
ENGL 044B – World Literature: 1500–1800 A.D. (3)
ENGL 044C – World Literature: 1800–Mid 20th Century (3)
ENGL 045A – Literature of the Bible (3)
ENGL 045B – Literature of the Bible (3)
ENGL 046A – English Literature (3)
ENGL 046B – English Literature (3)

ENGL 047 – Mexican and Chicano Literature (3)
ENGL 048 – Asian Literature (3)
ENGL 049A – Film as Dramatic Literature (3)
ENGL 049B – Film as Dramatic Literature (3)
ENGL 050 – African-American Literature (3)
ENGL 051 – Native American Mythology and Literature (3)
ENGL 052 – Asian American Literature (3)
ENGL 053 – Interpreting Poetry (3)
ENGL 054 – California Literature (3)
ENGL 057 – Modern Drama (3)
ENGL 059 – Children's Literature (3)
ENGL 060 – Masterpieces of Drama (3)
ENGL 061 – Introduction to the Novel (3)
ENGL 078A – Introduction to Shakespeare (3)
ENGL 078B – Introduction to Shakespeare (3)
ENGL 082A – Introduction to Mythology (3)
ENGL 082B – Introduction to Mythology (3)
ENGL 082C – Introduction to Mythology (3)

Journalism

JOUR 002 – Beginning Journalism (3)
JOUR 004A – Reporting and Newswriting (3)
JOUR 004B – Reporting and Newswriting (3)
JOUR 005 – Magazine and Small Publications (3)
JOUR 007A – Newswriting and Make-Up (4)
JOUR 007B – Newswriting and Make-Up (4)
JOUR 009 – Public Relations and Organizational Communication (3)
JOUR 021 – Beginning Press Photography (3)
JOUR 022 – Advanced Press Photography (3)
JOUR 023 – Photojournalism (3)

Photography

PHOT 021 – Introduction to Black and White Photography (3)
PHOT 022A – Large Format Photography (3)
PHOT 022B – Color Large Format Fine Arts Photography (3)
PHOT 023A – Color Photography (3)
PHOT 023B – Advanced Color Photography (3)
PHOT 024B – Experimental Photography (3)
CINE 025 – Film Art (3)
CINE 026A – Beginning Electronic Filmmaking (3)
CINE 026B – Intermediate Filmmaking–Electronic (3)
CINE 026C – Advanced Filmmaking (3)
CINE 027 – Cinematography (3)
PHOT 030 – Introduction to Digital Image Editing (3)
PHOT 031 – Beginning Digital Photography (3)
PHOT 024A – Alternative Processes in Photography (3)

Speech

SPCH 002 – Persuasion (3)
SPCH 003 – Voice and Diction (3)
SPCH 004 – Oral Interpretation (3)
SPCH 005 – Forensics–Speech and Debate Team (3)
SPCH 005A – Forensics Research and Preparation (Speech and Debate Team) (3)
SPCH 006 – Argumentation and Debate (3)

SPCH 008 – Readers’ Theater (3)
SPCH 009 – Small Group Communication (3)
SPCH 012 – Argumentation and Critical Thinking (3)
SPCH 013 – Introduction to Speech Communication (3)

Television and Radio

TVR 001 – Introduction to Electronic Media (3)
TVR 002A – Beginning Audio Production (3)
TVR 002B – Radio Broadcast Master Control Operations (3)
TVR 007 – Beginning TV Studio Production (3)
TVR 012 – Beginning Announcing and Performing in Electronic Media (3)
TVR 014A – Beginning Radio Production (3)
TVR 014B – Advanced Radio Production (3)
TVR 015 – Introduction to Media Writing (3)
TVR 016A – Television Production (4)
TVR 016B – Television Production (4)
TVR 017A – Television and Film Script Writing (3)
TVR 017B – Television and Film Script Writing (3)
TVR 018 – Radio and Television Newswriting (3)
TVR 019 – Introduction to Media Aesthetics and Cinematic Arts (3)
TVR 021 – Electronic Media Management (3)
TVR 024 – Electronic News Gathering and Editing (3)

Theatre Arts

THRT 002A – Acting I (3)
THRT 002B – Acting II (3)
THRT 002C – Advanced Acting Fundamentals (3)
THRT 004A – Mime Fundamentals (2)
THRT 004B – Mime for the Actor (2)
THRT 005A – Theatre History I (3)
THRT 005B – Theatre History II (3)
THRT 006 – Play Writing (3)
THRT 008 – Voice and Movement for the Performer (3)
THRT 010A – Makeup for Stage and Screen (3)
THRT 010B – Advanced Makeup for Stage and Screen (1)
THRT 012A – Technical Theater (4)
THRT 012B – Advanced Technical Theater (4)
THRT 013 – Introduction to Scenic Design (3)
THRT 015 – Costume Crafts (3)
THRT 026 – Improvisation Techniques (2)
THRT 029 – Rehearsal and Performance (3)
THRT 030 – Stage Techniques (1)
THRT 041 – Fundamentals of Stage Lighting (3)
THRT 075 – Musical Theater Workshop (2)

Requirements for the Associate in Arts Degree – see page 97.

Communication Studies – Associate in Arts Degree for Transfer to CSU

Top Code: 1506.00

This area of emphasis is intended to align with preparation for transfer into the CSU system in such majors as Art, Communication, English, Journalism, Television and Radio, Theatre Arts, and other similar fields of study. Communicating well and understanding the communication process are essential to professional success in many fields. People communicate to influence, to persuade, and to express. Learning to communicate effectively is one important reason for the study of Communication Arts. Studying the communication process helps one understand how the human mind works. Analyzing the messages in advertisements, television programs, and political speeches helps one to understand our society. Studying communication in everyday relationships, groups, and organizations shows us how these systems are created and maintained. Areas of study include face to face interaction, group process, organizational communication, rhetoric, advocacy, intercultural communication, political communication, and performance studies. Communication Arts students can expect to develop skills essential for leadership and career development, and for understanding and interpreting events.

The Associate in Arts in Communication Studies for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Program Outcomes:

1. Articulate the role of communication in multiple contexts.
2. Demonstrate competencies for ethical communication.
3. Critically analyze various communication practices.
4. Demonstrate effective verbal, nonverbal and written communication in diverse forms and contexts.

Associate in Arts in Communication Studies for Transfer Degree

Required core: 3 units

SPCH 001 – Fundamentals of Speech (3)

LIST A: Select any 2 courses (6 units)

- SPCH 009 – Communication and Group Leadership (3)
- SPCH 010 – Interpersonal Communication (3)
- SPCH 012 – Argumentation and Critical Thinking (3)
- or SPCH 006 – Argumentation and Debate (3)

LIST B: Select any 2 courses from below or from any List A course not used above (6 units)

- SPCH 003 – Voice and Diction (3)
- or SPCH 008 – Readers' Theatre (3)
- SPCH 004 – Oral Interpretation (3)
- SPCH 005 – Forensics - Speech and Debate Team (3)
- COMM 001 – Survey of Mass Communication (3)
- ENGL 012 – Intercultural Communication (3)
- or LING 012 – Intercultural Communication (3)

LIST C: Select any 1 course from below or from any List A or B course not used above (3-4 units)

- ANTH 002 – Cultural Anthropology (3)
- SOC 001 – Introductory Sociology (3)
- PSYC 001 – Introduction to Psychology (3)
- ENGL 001B – Reading and Composition (4)
- ENGL 001C – Intermediate Composition–Critical Thinking and Argument (4)
- JOUR 004A – Reporting and Newswriting (3)

REQUIRED SUBTOTAL.....	18-19
CSU General Education or IGETC CSU Pattern.....	37-39
Transferable Electives (as needed to reach 60 transferable units)	
DEGREE TOTAL	60

Speech Communication – Associate in Arts Degree

Top Code: 1506.00

A degree in Speech Communication from Pasadena City College prepares students for upper division (advanced level) coursework and several entry level positions within the field. This area of emphasis is primarily intended to prepare students to transfer and earn a bachelor's degree in Speech Communication or Communication Studies. Students develop verbal, nonverbal and interpersonal communication skills, apply critical thinking skills, and learn about human communication in multiple contexts. The Speech Communication major helps students to improve their relationship skills in both personal and professional life as well as prepares them for advancements in their careers.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Articulate the role of communication in multiple contexts.
2. Demonstrate competencies for ethical communication.
3. Critically analyze various communication practices.
4. Demonstrate effective verbal, nonverbal and written communication in diverse forms and contexts.

Requirements for the major in Speech Communication (18 units minimum)

All courses must be completed with a grade of C or better. All courses must be numbered 001–099.

Required courses:

Students must compete all of the following:

SPCH 001 – Fundamentals of Speech (3)
 or SPCH 001H – Honors Fundamentals of Speech (3)
 SPCH 006 – Argumentation and Debate (3)
 SPCH 010 – Interpersonal Communication (3)

Additional courses:

Students must complete at least nine additional units from the following courses:

SPCH 002 – Persuasion (3)
 SPCH 003 – Voice and Diction (3)
 SPCH 004 – Oral Interpretation (3)
 SPCH 005 – Forensics – Speech and Debate Team (3)
 SPCH 005A – Forensics Research and Preparation (Speech and Debate Team) (3)
 SPCH 008 – Readers' Theater (3)
 SPCH 009 – Small Group Communication (3)
 SPCH 012 – Argumentation and Critical Thinking (3)
 SPCH 013 – Introduction to Speech Communication (3)

Requirements for the Associate in Arts Degree – see page 97.

COMPUTER INFORMATION SYSTEMS

(Business Division)

CCNA Routing & Switching Preparation – Occupational Skills Certificate

Top Code: 0708.10

The CISCO Networking Academy's CISCO Certified Network Associate (CCNA) Routing & Switching curriculum provides students with necessary skills to seek entry-level employment in the field of Information Technology. Instruction includes training in installing, configuring, maintaining, and troubleshooting CISCO routers and switches in a small to enterprise environment.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Apply IPv4 and IPv6 routing technology solutions to administer Cisco routers in routed networks.
2. Apply LAN switching technology solutions to administer Cisco switches in switched networks.
3. Apply WAN technology solutions to administer Cisco routers in a WAN environment.
4. Apply infrastructure services, infrastructure security, and infrastructure management solutions to administer Cisco routers and switches in routed and switched networks.

Requirements for the Occupational Skills Certificate (12 units):

CIS 041 – CCNA R&S: Introduction to Networks (3)
CIS 042 – CCNA R&S: Routing and Switching Essentials (3)
CIS 163 – CCNA R&S: Scaling Networks (3)
CIS 164 – CCNA R&S: Connecting Networks (3)

Recommended Electives

CIS 169A – CCNA Security (4)
CIS 170 – CISCO IP Telephony Administration (4)
CIS 011 – Information and Communication Technology Essentials (4)
CIS 040 – UNIX/LINUX Administration (3)
CIS 045 – MCSA: Microsoft Windows System Administration 1 (4)
CIS 061 – Introduction to Information Systems Security (3)

CCNP Routing & Switching Preparation – Occupational Skills Certificate

Top Code: 0708.10

This Cisco Networking Academy's Cisco Certified Network Professional (CCNP) Routing and Switching curriculum provides students with necessary skills to seek entry to mid-level employment in the field of Information Technology. Instruction includes planning and implementing enterprise routing and switching solutions on Cisco routers and switches in complex enterprise routed and switched networking environment.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Apply advanced IP addressing and routing technology solutions to plan and implement scalable and secure enterprise routing solutions on complex enterprise routed networks.
2. Apply switching technology solutions to plan and implement scalable and secure enterprise switching solutions on complex enterprise switched networks.
3. Apply routing and switching technology solutions to plan and perform regular maintenance and network troubleshooting on complex enterprise routed and switched networks.

Required for the Occupational Skill Certificate (12 units):

CIS 165 – CCNP R&S Route: Implementing IP Routing (4)
CIS 167 – CCNP R&S Switch: Implementing Cisco IP Switched Networks (4)
CIS 168 – CCNP R&S TSHOOT: Troubleshooting and Maintaining IP Networks (4)

Recommended Electives

CIS 169A – CCNA Security (4)
CIS 169B – CCNP Security: Implementing Cisco Edge Network Security Solutions (4)
CIS 170 – CISCO IP Telephony Administration (4)

CISCO Advanced Network Engineer – Occupational Skills Certificate

Top Code: 0708.10

This Cisco Advanced Network Engineer curriculum provides students with necessary skills to seek entry to mid-level employment in the field of Information Technology. Instruction includes planning and implementing enterprise routing, switching, and network security solutions using Cisco routers, switches, and ASA firewalls on complex enterprise routed and switched networks.

An Occupational Skills Award is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Apply advanced IP addressing and routing technology solutions to plan and implement scalable and secure enterprise routing solutions on complex enterprise routed networks.
2. Apply switching technology solutions to plan and implement scalable and secure enterprise switching solutions on complex enterprise switched networks.
3. Apply network security technology solutions to plan and implement scalable and secure enterprise network security solutions on complex enterprise routed and switched networks.
4. Apply routing, switching, and network security technology solutions to plan and perform regular maintenance and network troubleshooting on complex enterprise routed and switched networks.

Requirements for the Occupational Skills Certificate (16 units):

CIS 165 – CCNP R&S Route: Implementing IP Routing (4)
CIS 167 – CCNP R&S Switch: Implementing CISCO IP Switched Networks (4)
CIS 168 – CCNP TSHOOT: Troubleshooting and Maintaining IP Networks (4)
CIS 169A – CCNA Security (4)

Recommended electives

CIS 040 – UNIX/LINUX Administration (3)
CIS 045 – MCSA: Microsoft Windows System Administration 1 (4)
CIS 061 – Introduction to Information Systems Security (3)
CIS 063 – Introduction to Cybersecurity: Ethical Hacking (3)
CIS 151 – VMWARE VSPHERE: Install, Configure, Manage (3)
CIS 169B – CCNP SECURITY: Implementing CISCO Edge Network Security Solutions (4)
CIS 170 – CISCO IP Telephony Administration (4)

Computer Information Systems – Computer Retail Sales & Support – Associate in Science Degree, Certificate of Achievement

Top Code: 0708.00

The Computer Retail Sales and Support Certificate of Achievement is the first stage of the statewide IT Technician pathway and prepares students to develop their fundamental IT Technician Skills. While completing coursework in customer service, communication, Microsoft Office, and information systems coursework, along with earning the CompTIA A+ industry certification, students gain practical experience as they learn how to succeed in an IT retail environment. Upon completion of this program, students would be qualified for entry level IT positions such as Retail Salespersons, Customer Service Representatives, Retail Sales Workers, and Sales Representatives.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an understanding of how networks of hardware, software, and communication technologies interact to create the foundation for productivity and efficiency in an organization or for an individual.
2. Develop business documents using word-processing, spreadsheet, presentation, and database software.
3. Troubleshoot computer systems (hardware and software) for end users.
4. Design an effective customer service strategy for an organization.

Requirements for the Certificate of Achievement (19 units):

Required Courses

BUS 009 - Introduction to Business (3)

BUS 160 – Sales and Customer Service (3)

BUS 011A – Business Communications (3)

BIT 025 – Survey of Computer Technology in Business (3)

or CIS 010 – Introduction to Information Systems (3)

BIT 106 – Business Software–Introduction to Microsoft Office System (3)

CIS 011 – Information and Communication Technology Essentials (4)

Requirements for the Associate in Science Degree – see page 101.

Computer Information Systems - Cybersecurity - Associate in Science Degree, Certificate of Achievement

Top Code: 0708.00

This cybersecurity program prepares students with necessary skills to seek employment in the field of Information Technology to administer enterprise network security. Instruction includes training in basic enterprise system and network administration with an emphasis on system and network security, and computer forensics. Students are exposed to a wide variety of security analysis/defensive tools, and students implement these tools. Upon completion of coursework, students will have the foundation needed to pursue industry certifications such as CompTIA Network+, CompTIA Security+, EC-Council Certified Ethical Hacker, Cisco CCENT, Cisco CCNA CyberOps, and Microsoft MCSA Windows Server or CompTIA Linux+/LPI Linux Administrator.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Describe basic enterprise system and network administration, security administration, and computer forensics.
2. Apply skills needed to:
 - a. Plan, implement, and maintain enterprise network solutions.
 - b. Plan, implement, and maintain enterprise operating system solutions.
 - c. Plan, implement, and support network security solutions.
 - d. Conduct digital investigations that conform to accepted professional standards.

Requirements for the Certificate of Achievement (21-23 units):

CIS 040 – UNIX/LINUX Administration (3)
or CIS 045 – MCSA: Microsoft Windows System Administration 1 (4)
CIS 041 – CCNA R&S: Introduction to Networks (3)
CIS 042 – CCNA R&S: Routing and Switching Essentials (3)
CIS 061 – Introduction to Information Systems Security (3)
CIS 063 – Introduction to Cybersecurity: Ethical Hacking (3)
CIS 065 – Computer Forensics Fundamentals (3)

Required Electives (Select 1 course)

CIS 011 – Information and Communication Technology Essentials (4)
CIS 012 – Introduction to Programming Concepts and Methodologies Using Python (3)
CIS 014 – C++ Programming (3)
CIS 016 – JAVA Programming (3)
CIS 031 – Introduction to Database Management Systems (3)
CIS 036 – Visual BASIC .NET Programming (3)
CIS 040 – UNIX/LINUX Administration (3)
CIS 045 – MCSA: Microsoft Windows System Administration 1 (4)
CIS 151 – VCP-DCV: VMWARE VSPHERE Administration (3)
CIS 163 – CCNA R&S: Scaling Networks (3)
CIS 164 – CCNA R&S: Connecting Networks (3)
CIS 169A – CCNA Security (4)
CIS 192 – Introduction to Web Development (3)
CIS 193 – Web Development Using Javascript (3)
CIS 197 – Web Development Using PHP and MYSQL (3)
CIS 199 – Web Development Using Ruby On Rails (3)

Requirements for the Associate in Science Degree – see page 101.

Computer Information Systems - Help Desk/User Support - Associate in Science Degree, Certificate of Achievement

Top Code: 0707.30*

This help desk / user support program prepares students with necessary skills to seek employment in help desk / user support in the field of Information Technology. Instruction includes training in computer hardware, software, Microsoft Windows server operating systems and Microsoft Windows client operating systems in a networked environment with an emphasis on Local Area Networks (LANs) and network security. Upon completion of coursework, students will have the foundation needed to pursue industry certifications such as CompTIA Network+, CompTIA Security+, Cisco CCENT, Cisco CCNA CyberOps, and Microsoft MCSA Windows Server.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Explain the key concepts of help desk / user support in a variety of working environments and networking technologies and techniques.
2. Apply skills needed to:
 - a. Install, configure, maintain, and troubleshoot hardware and software for a computer in a networked environment.
 - b. Implement and support basic enterprise network technologies.
 - c. Implement and support basic enterprise server technologies.
 - d. Implement and support basic enterprise network security technologies.

Requirements for the Certificate of Achievement (19-21 units):

CIS 041 – CCNA R&S: Introduction to Networks (3)
CIS 042 – CCNA R&S: Routing and Switching Essentials (3)
CIS 045 – MCSA: Microsoft Windows System Administration 1 (4)
CIS 061 – Introduction to Information Systems Security (3)

Required Electives (Select 2 courses)

CIS 011 – Information and Communication Technology Essentials (4)
CIS 012 – Introduction to Programming Concepts and Methodologies Using Python (3)
CIS 031 – Introduction to Database Management Systems (3)
CIS 040 – UNIX/LINUX Administration (3)
CIS 063 – Introduction to Cybersecurity: Ethical Hacking (3)
CIS 065 – Computer Forensics Fundamentals (3)
CIS 146 – MCSA: Microsoft Windows System Administration 2 (4)
CIS 151 – VCP-DCV: VMware vSphere Administration (3)
CIS 163 – CCNA R&S: Scaling Networks (3)
CIS 164 – CCNA R&S: Connecting Networks (3)

Requirements for the Associate in Science Degree – see page 101.

Computer Information Systems – Programming – Associate in Science Degree, Certificate of Achievement
Top Code: 0707.10

This Programming curriculum prepares students with necessary skills to seek entry-level employment in programming. Instruction includes development, testing, and maintenance of applications using programming languages including and not limited to Python, C++, Java, and Visual Basic .NET. Upon completion of coursework, students will have the foundation needed to pursue industry certifications including and not limited to Python institute's Certified Associate in Python Programming (PCAP), C++ Institute's C++ Certified Associate Programmer (CPA) and C++ Certified Professional Programmer (CPP), Oracle Certified Associate (OCA) – Java SE Programmer, and Oracle Certified Professional (OCP) – Java SE Programmer.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Analyze a problem and formulate steps required to solve that problem using a programming language.
2. Design Top Down or Object Oriented algorithms to solve problems.
3. Write, test and document a program based on a Top Down or Object Oriented algorithm.

Requirements for the Certificate of Achievement (18-19 units):

CIS 012 – Introduction to Programming Concepts and Methodologies Using Python (3)
CIS 014 – C++ Programming (3)
CIS 016 – Java Programming (3)
CIS 036 – Introduction to Visual Basic (3)

Required Electives (Select 2 courses)

CIS 038 – Advanced Visual Basic (3)
CIS 192 – Introduction to Web Development (3)
CIS 193 – Web Development Using Javascript (3)
CIS 197 – Web Development Using PHP and Mysql (3)
CIS 199 – Web Development Using Ruby On Rails (3)
CIS 031 – Introduction to Database Management Systems (3)
CIS 062 – Introduction to Systems Analysis (3)
CIS 010 – Introduction to Information Systems (3)
CIS 011 – Information and Communication Technology Essentials (4)

Requirements for the Associate in Science Degree – see page 101.

Computer Information Systems – System and Network Administrator – Associate in Science Degree, Certificate of Achievement

Top Code: 0708.20

This system and network administrator program prepares students with necessary skills to seek entry-level employment in the field of Information Technology to administer an enterprise network infrastructure and/or a network operating system infrastructure. Instruction includes training in installing, configuring, maintaining, and troubleshooting network devices and end devices with an emphasis on Cisco enterprise network infrastructure administration. Upon completion of coursework, students will have the foundation needed to pursue industry certifications such as CompTIA Network+, Cisco CCNA Routing and switching, Cisco CCNA CyberOps, and Microsoft MCSA Windows Server or CompTIA Linux+/LPI Linux Administrator.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Explain the key components of basic enterprise system and network administration.
2. Apply skills needed to:
 - a. Administer a Cisco enterprise network infrastructure for an organization of any size.
 - b. Administer a network operating system infrastructure for an organization of any size.

Requirements for the Certificate of Achievement (18-20 units):

CIS 040 – UNIX/LINUX Administration (3)
or CIS 045 – MCSA: Microsoft Windows System Administration 1 (4)
CIS 041 – CCNA R&S: Introduction to Networks (3)
CIS 042 – CCNA R&S: Routing and Switching Essentials (3)
CIS 163 – CCNA R&S: Scaling Networks (3)
CIS 164 – CCNA R&S: Connecting Networks (3)

Required Electives (Select 1 course)

CIS 011 – Information and Communication Technology Essentials (4)
CIS 012 – Introduction to Programming Concepts and Methodologies Using Python (3)
CIS 031 – Introduction to Database Management Systems (3)
CIS 040 – UNIX/LINUX Administration (3)
CIS 045 – MCSA: Microsoft Windows System Administration 1 (4)
CIS 061 – Introduction to Information Systems Security (3)
CIS 063 – Introduction to Cybersecurity: Ethical Hacking (3)
CIS 065 – Computer Forensics Fundamentals (3)
CIS 137 – MCSA: Microsoft Windows Client Operating Systems (3)
CIS 146 – MCSA: Microsoft Windows System Administration 2 (4)
CIS 151 – VMWARE VSPHERE: Install, Configure, Manage (3)
CIS 165 – CCNP R&S Route: Implementing IP Routing (4)
CIS 167 – CCNP R&S Implementing CISCO IP Switched Networks (4)
CIS 168 – CCNP TSHOOT: Troubleshooting and Maintaining IP Networks (4)
CIS 169A – CCNA Security (4)

Requirements for the Associate in Science Degree – see page 101.

Computer Information Systems – Web Development – Associate in Science Degree, Certificate of Achievement

Top Code: 0707.10

This Web Development curriculum prepares students with necessary skills to seek entry-level employment in web applications development. Instruction includes development, testing, deployment, and maintenance of secure web applications using HTML, CSS, JavaScript, PHP, MySQL, Ruby on Rails, and Python.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Analyze a problem and formulate steps required to solve that problem using web development programming languages.
2. Design Top Down or Object Oriented algorithms to solve problems.
3. Develop, test, deploy, and maintain secure web applications based on a Top Down or Object Oriented algorithm.

Requirements for the Certificate of Achievement (18–19 units):

CIS 012 – Introduction to Programming Concepts and Methodologies Using Python (3)
CIS 192 – Introduction to Web Development (3)
CIS 193 – Web Development Using Javascript (3)
CIS 197 – Web Development Using PHP and MYSQL (3)

Required Electives (Select 2 courses)

CIS 199 – Web Development Using Ruby on Rails (3)
CIS 014 – C++ Programming (3)
CIS 016 – JAVA Programming (3)
CIS 036 – Introduction to Visual Basic (3)
CIS 038 – Advanced Visual Basic (3)
CIS 031 – Introduction to Database Management Systems (3)

Requirements for the Associate in Science Degree – see page 101.

COSMETOLOGY

(Engineering & Technology Division)

Cosmetology – Associate in Science Degree, Certificate of Achievement

Top Code: 3007.00

The Cosmetology Certificate of Achievement is a comprehensive curriculum that prepares students for the California State Board of Cosmetology Exam and a wide range of careers in the beauty industry. The curriculum offers theoretical and practical disciplines as well as interactive demonstrations and hands-on applications that train students to become creative professionals and gain entry level employment as cosmetologists, nail technicians, aestheticians, salon managers or small business owners.

The program requires a minimum of 1,600 hours and will take approximately one year to complete with full-time commitment. All students will start in the Intro to Cosmetology class, which is an introductory course that teaches basic cosmetology principles and techniques. The program costs approximately \$4,000, with \$2,000 of the total cost required during the first week of the program. The \$2,000 includes tuition, kit, books, uniforms, and other school related materials. Students must have the cosmetology kit, books, and uniforms within the first week of the Intro to Cosmetology class. According to State Board regulation, students must have proof of 10th grade high school completion to enroll in the program.

After completion of Intro to Cosmetology with a passing grade of C or above, students can take Haircutting, Hair Color, Hair Styling, Chemical Texture, Skin Care, Nail Care, State Board, and Professional Development classes, which concentrate on specific topics of the cosmetology field. All classes must be passed with a C or above grade or must be retaken for a passing grade to complete the program. Each class will be offered twice per semester, every 8 weeks. Students will have the flexibility of part-time or full-time commitment to the program. Full-time commitment is strongly recommended, as students will be able to finish the program and become licensed in approximately 1 year. COSM 109-Salon Lab class is a 4-week class offered for students who have completed and passed the rest of the classes, but have not reached the required State Board hours. Students must register for the Salon class to accumulate the required hours by working on clients in a salon setting. Once students have successfully passed all classes and completed the 1,600 hour program, they will receive a Certificate of Achievement and be able to take the State of California Cosmetology Exam to become licensed cosmetologists.

A student who is dropped from the program for unsafe or inappropriate conduct, or excessive absences twice is not eligible to re-enroll except upon approval of the college Petitions Committee. Students who have acquired 300 or less hours in another cosmetology program may be admitted to the program subject to availability of space.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Enhance conversational abilities and build confidence to communicate with clients from different cultural backgrounds.
2. Evaluate client needs and select appropriate techniques and products to achieve desired results.
3. Use current technology effectively to keep up with trends in the beauty industry.
4. Work effectively as a team member in a diverse environment.
5. Demonstrate customer service skills, self-growth, and personal development to remain current with industry standards.

Requirements for the Certificate of Achievement (45 units):

COSM 100 – Intro to Cosmetology (9)
COSM 101 – Haircutting (4.5)
COSM 102 – Hair Color (4.5)
COSM 103 – Hairstyling (4.5)
COSM 104 – Chemical Texture (4.5)
COSM 105 – Skin Care (4.5)
COSM 106 – Nail Care (4.5)
COSM 107 – State Board (4.5)
COSM 108 – Professional Development (4.5)

Recommended electives

COSM 109 – Salon (3)

Requirements for the Associate in Science Degree – see page 101.

Cosmetology – Instructional Techniques in Cosmetology – *Certificate of Achievement*

Top Code: 3007.00

The curriculum will prepare licensed cosmetologists who want to become cosmetology instructors. Upon successful completion of this program, COSM 150 and COSM 151 (600 hours), a student will be eligible to take the California State Board Instructors Examination for licensure as an instructor.

Students must hold a valid State of California Cosmetology license to enroll in this program. Continuous enrollment until completion of the program is required.

Students will be responsible, during the first week of school, to pay for their tuition, books, CD-ROM, cosmetology supplies and a black lab coat.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

**Requirements for the Certificate of Achievement
(20 units/600 hours):**

Recommended sequence:

Semester I

COSM 150 – Instructional Techniques in Cosmetology (10)

Semester II

COSM 151 – Instructional Techniques in Cosmetology (10)

CULINARY ARTS

(Engineering & Technology Division)

Culinary Arts – Associate in Science Degree, Certificate of Achievement

Top Code: 1306.30

The curriculum prepares students for working in various food services industries. Graduates of the program qualify to seek employment in restaurants, cafeterias, hotels, health care facilities, and educational institutions as cooks, bakers, and assistant and training managers.

Instruction is offered in all phases of food preparation and presentation. Studies emphasize foods, terms and techniques, safety and sanitation, baking, catering, food preparation, menu planning, merchandising, and restaurant management. Students are kept informed of industry trends through guest speakers, trade publications, and field trips to local industries and culinary shows. All students participate daily in the kitchen lab in planning, preparing and serving cafeteria and special event meals.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate the academic skills and abilities to enter a career in the Food Services and Culinary Arts fields.
2. Demonstrate the recognition of the need for lifelong learning in the fields of Food Services and Culinary Arts.
3. Demonstrate knowledge of the sanitation requirements, ethical and social responsibilities of a career in Food Services and Culinary Arts fields.
4. Demonstrate the value of teamwork in the fields of Food Services and Culinary Arts.
5. Demonstrate an understanding of the career paths available in Cooking, Baking and Catering professions.
6. Produce quality food using the manipulative skills and technical training they received at Pasadena City College.

Requirements for the Certificate of Achievement (40 units):

Recommended sequence:

Semester I

CUL 145A – Introduction to Culinary Arts/Food Services (10)

Semester II

CUL 145B – Introduction to Food Services Production (10)

Semester III

CUL 145C – Quantity Cooking Techniques (10)

Semester IV

CUL 145D – Special Events Management (10)

Recommended Electives

CUL 154A – Introduction to Food Service Baking & Pastry (3)

CUL 154B – Advanced Baking and Pastry (3)

CUL 158 – Field Practice in Food Services (4)

CUL 160A – Introduction to Catering (3)

CUL 160B – Advanced Catering (3)

Requirements for the Associate in Science Degree – see page 101.

Baking & Pastry – Occupational Skills Certificate

Top Code: 1306.30

This program offers students study in baking and pastry techniques for seeking entry-level employment in the industry. The curriculum includes: introduction to small-scale baking and pastry, and techniques for large quantity baking and pastry procedures; kitchen safety and sanitation; tools and equipment identification, usage and care; product identification; measurements and temperature controls; time management; product costing for retail sales; proper mixing and baking techniques for breads, cakes, cookies, laminated doughs, and fancy pastries; assembling three-layer cakes to multiple-tiered cakes and intricate decorating.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate culinary arts skills in the baking and cake decorating field.
2. Identify usage of baking products by types for making high quality and large quantity baked goods.
3. Practice sanitation regulations established by the local Department of Environmental Health, pertaining to personal hygiene, kitchen and equipment management.
4. Explain the value of teamwork required in the food service industry.
5. Demonstrate the manipulative skills and technical requirements in the baking and cake decorating field.

Requirements for the Occupational Skills Certificate (6 units):

Recommended sequence:

Semester I

CUL 154A – Introduction to Food Service Baking & Pastry (3)

Semester II

CUL 154B – Advanced Baking and Pastry (3)

Catering – Occupational Skills Certificate

Top Code: 1306.30

This program offers students training in two aspects of the catering business: entry level employment skills and small business operation/ownership. The curriculum includes: introduction to catering for small-scale events and advanced catering business practices for large-scale events; kitchen safety and sanitation; tools and equipment identification, usage and care; product identification and costing for catered events; time management for seeking employment with catering facilities at hotels, casinos, resorts and country clubs. For seekers of self-employment, studies will include employment/workers compensation requirements (Employment Department); safe packing and transportation of products; event rentals; site dining/serving setup/take down; time management; commissary development and leasing; legal liabilities and responsibilities; contract negotiations and customer service relations.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate the capability to acquire and operate a catering business.
2. Explain the skills to establish professional contacts with reputable purveyors of qualified and quantity products in the operation of a catering business.
3. Develop the business skills of record-keeping in all aspects of a professional business; as well develop professional standards of conduct and attitudes necessary to operate a catering business.
4. Practice safe food handling/packing and transportation of customers ordered products necessary to operate a catering business.

5. Demonstrate the ability to organize on site dining/serving, setup/takedown of catered facilities in an orderly and timely manner.
6. Explain all legal documentation for a facility rental, sanitation certification, business licenses, and employee compensation, as required by local authorities.

Requirements for the Occupational Skills Certificate (6 units):

Recommended sequence:

Semester I

CUL 160A – Introduction to Catering (3)

Semester II

CUL 160B – Advanced Catering (3)

Kitchen Assistant – Occupational Skills Certificate

Top Code: 1306.30

This program prepares students for employment in the food service industry at an entry-level. Employment in restaurants, hospitals, hotels, casinos, resorts, and country clubs may include: prep cooks, line cooks, salad/sandwich preparers, baking and dessert cooks, catering servers, and banquet coordinators. Students will learn to use these skills to support concurrent industry requirements through laboratory training in food preparation/presentation, participation in on- and off-premise campus catered events for faculty/staff, and private entities; and baking products for daily requirements and special occasions.

An Occupational Skills Certificate is awarded upon completion of all courses with a grade of C or better.

Program Outcomes:

1. Demonstrate acquired professional skills and attitudes employers require of employees serving the general public.
2. Demonstrate both personal and professional knowledge of sanitation requirements.
3. Explain the importance of team work, in a manner that is necessary for all aspects of food preparation.
4. Explain the importance of maintaining good personal health, good attendance, and adherence to work schedules in the success of maintaining their employment in the food service industry.

Requirements for the Occupational Skills Certificate (16 units):

Recommended sequence:

Semester I

CUL 145A – Introduction to Culinary Arts/Food Services (10)

Semester II

CUL 154A – Introduction to Food Service Baking & Pastry (3)

CUL 160A – Introduction to Catering (3)

Recommended electives

ENGL 434 – Technical/Vocational Reading (3)

TECH 107A – Technical Calculations (3)

DANCE

(Performing and Communication Arts Division)

Dance – Associate in Arts Degree

Top Code: 1008.00

Students who complete the Dance major AA degree from Pasadena City College will gain a strong foundation in dance as an expressive and performing art form, emphasizing dance technique, performance, dance-making, dance production, and the cultural and historical significance of dance. Completion of an AA degree in dance greatly increases success in auditions and acceptance into BA/BFA programs at colleges and universities. The PCC dance major provides rigorous and comprehensive, pre-professional training for a career in concert dance, commercial dance, musical theatre and/or dance teaching. Completion of this degree provides entry into a career performing, choreographing or teaching in the field.

Interested students should be advised that a career in dance is typically very competitive and low-salaried, as is frequently the case with performing arts.

Pre-requisites skills: In order to enroll in the dance technique core requisites of units in Modern Dance III, Modern Dance IV, Ballet III, Ballet IV, Jazz III, Jazz IV, students must have either passed the level II version of that class or obtain an official Prerequisite waiver.

Program Outcomes:

1. Proficiency in dancing, including a strong foundation in dance technique, with artistic nuance, versatility, and the ability to interpret direction.
2. Fluency in the art of choreography, establishing a practice in the invention and composition of movement, with competence in directing and collaborating with dancers.
3. Awareness of social, cultural and spiritual roles of dance in contemporary and historical civilization, with an ability to identify and discuss styles, their origins and global fusions.
4. Performance experience in a variety of contexts and venues, ranging from fully produced, large-scale proscenium shows, to alternative or screen-based productions.

Requirements for the Certificate of Achievement (20 units):

Required Courses

DANC 008A – Beginning Composition and Choreography (2)
DANC 012 – Improvisation (1)
DANC 021A – Dance History: Cultural and Social Heritage (3)
DANC 021B – Dance History: Spectacle and Performance Art (3)
DANC 026 – Music for Dance (2)
DANC 022A – Dance Performance I (2)
DANC 023 – Dance Repertoire (1)

LIST A – COMPLETE 3 UNITS FROM BELOW

DANC 009C – Modern Dance III (1)
DANC 009D – Modern Dance IV (1)
DANC 011C – Ballet III (1)
DANC 011D – Ballet IV (1)
DANC 015C – Jazz Dance III (1)
DANC 015D – Jazz Dance IV (1)

LIST B – COMPLETE 2 UNITS FROM BELOW

DANC 014A – Hip Hop Dance I (1)
DANC 014B – Hip Hop Dance II (1)

DANC 004H – Flamenco Dance (1)
DANC 006A – Tap Dance I (1)
DANC 006B – Tap Dance II (1)
DANC 006C – Tap Dance III (1)
DANC 006D – Tap Dance IV (1)

LIST C – COMPLETE 1 UNIT FROM BELOW

DANC 005A – Social Dance I (1)
DANC 005B – Social Dance II (1)

LIST D: COMPLETE 3 UNITS FROM BELOW

DANC 004H – Flamenco Dance (1)
DANC 005A – Social Dance I (1)
DANC 005B – Social Dance II (1)
DANC 006A – Tap Dance I (1)
DANC 006B – Tap Dance II (1)
DANC 006C – Tap Dance III (1)
DANC 006D – Tap Dance IV (1)
DANC 008B – Intermediate Composition and Choreography (2)
DANC 009A – Modern Dance I (1)
DANC 009B – Modern Dance II (1)
DANC 009C – Modern Dance III (1)
DANC 009D – Modern Dance IV (1)
DANC 011A – Ballet I (1)
DANC 011B – Ballet II (1)
DANC 011C – Ballet III (1)
DANC 011D – Ballet IV (1)
DANC 013 – Pilates-Based Method for Alignment and Correction (1)
DANC 014A – Hip Hop Dance I (1)
DANC 014B – Hip Hop Dance II (1)
DANC 015A – Jazz Dance I (1)
DANC 015B – Jazz Dance II (1)
DANC 015C – Jazz Dance III (1)
DANC 015D – Jazz Dance IV (1)
DANC 020 – Independent Study (1)
DANC 022B – Dance Performance II (2)
DANC 025 – Movement for Child Development (2)
THRT 075 – Musical Theater Workshop (2)

Recommended Electives

THRT 002A – Acting I (3)
THRT 015 – Costume Crafts (3)
THRT 041 – Fundamentals of Stage Lighting (3)
THRT 004A – Mime Fundamentals (2)
KINA 040A – Beginning Yoga (1)
KINA 040B – Intermediate Yoga (1)
KINA 040C – Advanced Yoga (1)
KINT 182 – Anatomical Principles of Kinesiology and Fitness (3)

DENTAL

(Health Sciences Division)

Dental Assisting – Associate in Science Degree, Certificate of Achievement

Top Code: 1240.10

The Dental Assisting curriculum prepares the student to take on significant responsibility as a member of the dental health care team. Employment positions are available in dental offices, hospitals, clinics, dental schools and professional sales. Dental Assistants greatly increase the efficiency of the dentist in delivery of quality oral health care. A career in dental assisting offers many challenges and a variety of procedures. Specific tasks may be performed such as: assisting with and providing direct patient care, taking and developing dental radiographs (x-rays), sterilizing instruments, taking impressions, and performing office management tasks. Dental assisting offers a variety, flexibility, excellent working conditions and personal satisfaction. Students successfully completing the program will receive the following certificates for courses approved by the Dental Board of California: Radiation Safety, Pit and Fissure Sealant, Coronal Polish, Ultrasonic Scaling for Removal of Orthodontic Cement, Dental Practice Act and Infection Control. Participation of all off-campus assigned sites are required for program completion. Students must provide their own transportation to off-campus sites. Some off-campus sites require homeland security screening and verification of legal status. A selected uniform, malpractice insurance, and instrument kit rental are required for the program participation.

The dental assisting program is accredited by the Commission on Dental Accreditation of the American Dental Association and approved as a Registered Dental Assisting Program by the Dental Board of California. Upon successful completion of the program and meeting board exam eligibility requirements, the student can take the following exams: Dental Assisting National Board examination to obtain a certificate as a Certified Dental Assistant (CDA), Certified Orthodontic Assistant (COA) and the California Registered Dental Assistant (RDA) examinations to obtain a license as a Registered Dental Assistant. Upon completion of the advanced Orthodontic assistant class, the student qualifies to take the California Orthodontic Assistant Exam (OA).

Fingerprinting is mandatory with the RDA examination. A social security number or a TIN is required to take the RDA exam.

The program in dental assisting is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of *"Approval without reporting requirements"*. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611. The Commission's web address is: <http://www.ada.org/100.aspx>.

Dental Board of California
<http://www.dbc.ca.gov/>

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Requirements for Admission into the Dental Assisting Program are:

1. Graduation from an accredited high school or equivalent with a 2.0 grade point average. Satisfactory completion of College level courses.
2. Grade point average (GPA) of 2.0 for all college work.
3. Two sets of high school and college transcripts.
4. Completed application of admission to the program.
5. Current CPR/Basic Life Support (BLS) card, which must be maintained while in the program. CPR training can be obtained from the American Heart Association, or the American Red Cross, Health Care Provider course.
6. After acceptance into the program, submit a completed health data form evidencing good health including required immunizations/chest x-ray or Mantoux test.

The Application Process:

Applications are accepted on a year-round basis. Students interested in the part-time Dental Assisting Program or additional program information should consult with the program director.

Recommended Preparation:

Eligibility for English 100 or equivalent.

Additional Courses Required for the Associate in Science Degree:

Consult with a Counselor to determine which classes qualify to receive credit in the general education categories of Natural Sciences, Behavioral Sciences, Humanities, Language and Rationality, American Institutions, Health Education, and Physical Activity for the Associate in Science degree.

Program Outcomes:

1. Demonstrate technical skills and abilities, safety and infection control procedures as outlined by the California Dental Practice Act. (DA 100, 108, 110, 123A, 123B, 125, 127, 135, 140, 142).
2. Exhibit professional growth, behavior, knowledge and development; foster empathy and concern; and work toward a commitment of excellence at all times (all DA courses).
3. Exhibit communication and conflict skills and strategies that are effective with individuals and groups who are diverse in age, gender or culture (all DA courses).

Requirements for the Certificate of Achievement (37.5 units):

DA 140 – Oral Radiology (4)
DA 135 – Registered Dental Assistant Techniques (3)
DA 110 – Introduction to Dental Essentials (3.5)
DA 100 – Dental Materials (3)
DA 111 – Applied Human Behavior (2)
DA 108 – Infection Control in Dentistry (2)
DA 123A – Chairside Techniques (4.5)
DA 123B – Advanced Chairside Techniques (4)
DA 124 – Dental Office Administration (3)
DA 127 – Clinical Experience II (6.5)
DA 125 – Clinical Experience I (2)

Recommended Electives

DA 200A – Dental Assisting Lab (1)
DA 200B – Dental Assisting Technical Skills Enhancement Lab (1)
DA 142 – Advanced Oral Radiology Techniques (.50)
DA 149 – Orthodontic Assistant (2.5)
DA 150 – Clinical Experience in a Specialty Practice (.50)
DA 160 – Comprehensive Dental Assisting Skills and Techniques (.50)

Requirements for the Associate in Science Degree – see page 101.

Dental Hygiene – Associate in Science Degree, Certificate of Achievement

Top Code: 1240.00

This two-year curriculum prepares a student to provide educational, clinical and therapeutic services supporting oral health. Studies include the biological basis of the health of the teeth and oral cavity, as well as procedures used to prevent decay and to maintain dental health. Employment opportunities include working as a licensed dental hygienist in dental offices, public clinics, schools, industry, research, and community health. Participation of all off campus assigned sites are required for program completion. Students must provide their own transportation to some off-campus clinical sites. Some off campus sites require homeland security screening and verification of legal status.

The program is approved by the Dental Hygiene Committee of California (DHCC) and is accredited by the Commission on Dental Accreditation of the American Dental Association. Upon successful completion of the Dental Hygiene National Board examination and the dental hygiene curriculum, the student receives a Certificate of Achievement, an Associate in Science Degree, and is eligible to take any applicable regional or state board examination(s) to obtain licensure as a Dental Hygienist. Applicants for Dental Hygiene licensure are required to submit official fingerprints. The law provides for denial of licensure for crimes or acts which are related to dental hygiene, qualifications and/or duties.

Requirements for selection and acceptance into the Dental Hygiene program are:

1. Graduation from High School or the equivalent
2. Minimum grade of C in:
 - ENGL 001A
 - PSYC 001
 - SPCH 001
 - SOC 001
 - Intermediate Algebra
 - Humanities
 - U.S. History (one course) and Political Science
 - or AMER 125
 - Physical Activity (2 units)
3. Minimum grade of C in these science courses (It is recommended that they be taken within the last five years):
 - MICR 002
 - NUTR 011
 - ANAT 025
 - PYSO 001
 - or PYSO 002AB
 - CHEM 001AB
 - or CHEM 002AB
4. Overall GPA of 3.0 for all prerequisite college work.
5. Completed application for selection and acceptance into the program.
6. Dental Hygiene students must have the ability to communicate effectively.
7. After acceptance into the program, submit a completed health data form evidencing physical and emotional health, including required immunizations/chest x-ray or Mantoux test.
8. Current CPR/Basic Life Support (BLS) card that must be maintained while in the program.

Recommended preparation:

High school courses in biology or physiology, algebra and chemistry with a laboratory. It is strongly recommended that general education requirements for the Associate in Science Degree be satisfied prior to enrolling in the program. Degree requirements must be met to be eligible to sit for license exams.

Acceptance to the program is competitive. Selection is based upon a combination of academic work completed, and grades earned. Other criteria such as work experience may also be considered. Please see Pasadena City College Dental Hygiene Information Brochure for current application instructions and selection criteria.

Program Outcomes:

1. Acquire the theoretical knowledge that will allow them to provide comprehensive dental health care to their clients/patients.
2. Apply the dental hygiene process of care to provide competent dental hygiene care as specified by the Dental Practice Act.

Requirements for the Certificate of Achievement (59.5 units):

ANAT 115 – Head and Neck Anatomy, Histology and Embryology (3)
DH 101A – Fundamentals of Dental Hygiene (5)
DH 101B – Fundamentals of Dental Hygiene Theory and Practice (5)
DH 104A – Clinical Dental Hygiene Theory and Practice: Pain Control (2)
DH 104B – Clinical Dental Hygiene Theory and Practice (7)
DH 104C – Clinical Dental Hygiene Theory and Practice (7)
DH 105 – Pathology (3)
DH 107 – Introduction to Oral Health Research (2)
DH 108 – Pharmacology (2)
DH 109 – Dental Health Education, Communication and Diversity (2)
DH 111 – Current Issues in Dental Hygiene (3)
DH 113A – Periodontics (2)
DH 113B – Periodontics (1)
DH 116 – Dental Materials (2.5)
DH 117 – Dental Morphology and Occlusion (2)
DH 119A – Community Dental Health (2)
DH 121 – Clinical Practice in Alternative Settings (1)
DH 121 – Clinical Practice in Alternative Settings (1)
DH 122 – Medical Evaluation of Dental Hygiene Patients (2)
DH 141 – Oral Radiology (3)
DH 200A – Directed Studies in Clinical Dental Hygiene (1)
DH 200B – Directed Studies in Clinical Dental Hygiene (1)
DH 201 – Dental Hygiene Skills Enhancement Lab (1)

Recommended electives

DH 119B – Community Dental Health Lab (0.5)
DH 120 – Independent Study (1)
DH 200C – Clinical Board Preparation (1)

Requirements for the Associate in Science Degree – see page 101.

Dental Laboratory Technology – Associate in Science Degree, Certificate of Achievement

Top Code: 1240.30

The PCC Dental Laboratory Technology curriculum prepares a student for employment in a private or commercial dental laboratory or dental office performing dental laboratory techniques and procedures. Emphasis is on fundamental and advanced laboratory procedures and concepts in all five specialized areas: complete dentures, crown and fixed partial dentures, ceramics, removable partial dentures, and orthodontics and pedodontics. Instruction includes courses in dental morphology, materials, anatomy, and dental laboratory management. Students will learn in a fully equipped, state-of-the-art laboratory and will be instructed by caring and experienced faculty.

The Dental Laboratory Technology program is accredited by the Commission on Dental Accreditation of the American Dental Association, a specialized accrediting body recognized by the United States Department of Education. The College is also a member of the National Association of Dental Laboratories (NADL). Upon successful completion of the curriculum, a student is eligible to take the written Recognized Graduate Examination given by the National Board for Certification. A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Pasadena City College will also award an Associate in Science Degree with a major in Dental Laboratory Technology upon successful completion of courses prescribed for the Certificate of Achievement in the Dental Laboratory Technology Program and completion of certain general education classes. Please consult with a College counselor or the College Catalog for more information.

Students must provide their own transportation to off-campus laboratory sites for their Winter session Clinical Experience course in their second year.

Fabricating a dental prosthesis is a tremendously detailed procedure that requires a knowledge of structural mechanics, metallurgy, materials science, chemistry, biology, physiology, physics, head and neck anatomy, colorimetry and esthetics. A good dental laboratory technician not only possesses working knowledge in these areas, but also has great manual and perceptual skills. The Pasadena City College Dental Laboratory Technology Program has been providing a well-rounded education in dental technology since 1967.

The program in dental laboratory technology is approved by the Dental Board of California and accredited by the Commission on Dental Accreditation and has been granted the accreditation status of *"Approval without reporting requirements"*. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611. The Commission's web address is: <http://www.ada.org/100.aspx>.

Requirements for admission into the Dental Laboratory Technology Program are:

1. Verification of graduation from an accredited high school, or GED, or equivalent with a 2.0 or better grade point average.
2. Satisfactory scores on manual dexterity and hand/eye coordination tests which are given by appointment. To schedule an appointment contact the program director or test coordinator by calling (626) 585-7200.
3. Submission of a completed Application for Admission to the program.
4. Health clearance by a physician.

Program Outcomes:

1. Perform as competent entry-level dental laboratory technicians.
2. Demonstrate marketable knowledge and skills to secure employment as a dental technician.
3. Successfully complete the [National] Recognized Graduate (R/G) Examination.
4. Uphold the ethics of the dental laboratory technology profession.
5. Demonstrate pursuit of lifelong professional growth and development.
6. Assume leadership roles in the dental laboratory community.

Requirements for the Certificate of Achievement (61 units):

Recommended sequence:

Semester I

DLT 113A – Denture Techniques (4)

DLT 114A – Crown and Bridge (4)

DLT 115 – Dental Morphology (0.5)

DLT 116A – Dental Anatomy (1.5)

DLT 200A – Directed Studies in Basic Dental Laboratory Techniques (1)

Winter Intersession (First Year)

DLT 116B – Dental Anatomy (2)

DLT 200B – Directed Studies in Intermediate Dental Laboratory Techniques (1)

Semester II

DLT 109 – Dental Materials (2)

DLT 113B – Denture Techniques (4)

DLT 114B – Crown and Bridge (4)

DLT 116C – Advanced Dental Anatomy (2.5)

DLT 200C – Directed Studies in Advanced Dental Laboratory Techniques (1)

Semester III

DLT 116D – Highly Advanced Dental Anatomy (2.5)

DLT 117 – Orthodontics and Pedodontics (2)

DLT 118A – Ceramics (4)

DLT 119A – Partial Dentures (4)

DLT 201A – Directed Studies in Basic Dental Laboratory Techniques (1)

Winter Intersession (Second Year)

DLT 125 – Clinical Experience (3.5)

DLT 201B – Directed Studies in Intermediate Dental Laboratory Techniques (1)

Semester IV

DLT 118B – Advanced Ceramics (6)

DLT 119B – Partial Dentures (2)

DLT 124 – Dental Laboratory Management (2)

DLT 126 – Transition to Dental Laboratory Industry (2)

DLT 201C – Directed Studies in Advanced Dental Laboratory Techniques (1)

Required Electives**Summer Intersession First Year**

SPCH 001 – Fundamentals of Speech (3)

or SPCH 010 – Interpersonal Communication (3)

Recommended Electives

ART 025 – Beginning Sculpture (3)

ART 031A – Color and Composition–Two Dimensional Design (3)

ART 034A – Crafts–Materials and Processes (3)

BUS 013 – Business Lectures (1)

BUS 116 – Small Business Management (3)

BUS 121 – Workplace Preparation and Skills (2)

DA 110 – Introduction to Dental Essentials (3)

DA 112 – Medical–Dental Terminology (2)

ENGL 450 – Introduction to English Essentials (3)

NURS 201 – Basic Strategies for Success in Nursing Education (1)

COUN 012 – Personal Growth and Development (3)

COUN 010 – Introduction to College (1)

COUN 011 – Learning Strategies and College Skills Development (1)

COUN 017 – Career Planning (2)

Requirements for the Associate in Science Degree – see page 101.

Restorative Dental Technology – Associate in Science Degree, Certificate of Achievement

Top Code: 1240.30

The Pasadena City College Restorative Dental Technology Program curriculum prepares a student for employment in a private or commercial dental laboratory or dental office performing restorative dental techniques and procedures. Emphasis is on fundamental and advanced laboratory procedures and concepts in all specialized areas: removable complete dentures, crown and fixed partial dentures, dental ceramics, removable partial dentures, implants, digital dentistry CAD CAM (three levels), and orthodontics and pedodontics. Instruction includes courses in intraoral and facial structures, dental materials, two-levels of dental anatomy, articulator instrumentation, functional anatomy, dental calculations, dental laboratory management, juris prudence, and legalities, as well as workplace readiness and dental communications. Students learn in two fully equipped, state-of-the-art laboratories dedicated to fixed and removable prosthetic fabrication and a digital workflow area. Students learn from caring, dedicated, and experienced faculty.

The Restorative Dental Technology Program is accredited by the Commission on Dental Accreditation (CODA) of the American Dental Association (ADA), a specialized accrediting body recognized by the United States Department of Education. The Program is also a member of the National Association of Dental Laboratories (NADL). Upon successful completion of the curriculum, a student is eligible to take the written Recognized Graduate Examination given by the National Board for Certification.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better. Pasadena City College will also award an Associate in Science Degree with a major in Restorative Dental Technology upon successful completion of courses prescribed for the Certificate of Achievement in the Restorative Dental Technology Program and completion of certain general education classes. Please consult with a college counselor or the college catalog for more information. Students must provide their own transportation to off-campus laboratory sites for their Clinical Experience course during the second year.

Fabricating a dental prosthesis is a tremendously detailed procedure that requires knowledge of structural mechanics, metallurgy, materials science, chemistry, biology, physiology, physics, head and neck anatomy, colorimetry and esthetics. A good restorative dental technologist not only possesses working knowledge in these areas, but also has great manual and perceptual skills. The Pasadena City College Restorative Dental Technology Program has been providing a well-rounded education in restorative dental technology since 1967.

ELIGIBILITY FOR ENTRANCE INTO THE RESTORATIVE DENTAL TECHNOLOGY PROGRAM:

1. Graduation from a U.S. accredited high school, GED, or the equivalent (such as officially translated/evaluated transcripts* from a high school or college in another country) with a 2.0 grade point average.
2. A Restorative Dental Technology Application for Admission signed, dated and filled out completely.
3. Satisfactory scores on Manual Dexterity and Hand/Eye Coordination Exams that are given by appointment with the Restorative Dental Technology Admissions Coordinator. Please call (626) 585-7200 to schedule an appointment.
4. One official U.S. high school transcript or official GED Certificate or official Equivalency Report from one of the college's acceptable companies; NOT required if Associate or higher degree is already posted on official U.S. college transcripts. *
5. One official transcript from ALL U. S. colleges and universities attended including Pasadena City College. *

* UNOFFICIAL TRANSCRIPTS AND PHOTOCOPIES OF DIPLOMAS ARE NOT ACCEPTABLE.

Please note that upon acceptance to the Restorative Dental Technology Program the College's Records Office will also require a second set of official transcripts and a health clearance by a physician.

The Restorative Dental Technology Program is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of "Approval without reporting requirements". The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611. The Commission's web address is: <http://www.ada.org/100.aspx>.

Program Outcomes:

1. Demonstrate competence in performing basic and advanced level laboratory procedures and techniques required to design and fabricate fixed and removable dental prostheses and basic orthodontic appliances appropriate for an entry-level restorative dental technologist as verified by skills and knowledge specified in the American Dental Association (ADA) Commission on Dental Accreditation (CODA) Standards for Dental Laboratory Technology.
2. Apply basic knowledge of physical properties, uses and manipulation of dental materials to insure proper materials are used in correct proportions for specific restorative procedures and that appropriate safety and disposal procedures are followed.
3. Design and fabricate fixed and removable dental prostheses that follow appropriate tooth form and function and take into consideration structures of the oral cavity, determinants of occlusal morphology, and physiology of mandibular movements.
4. Use oral, non-verbal, and written communication skills for effective professional interactions in the dental office or laboratory setting.
5. Function as a member of a diverse dental team demonstrating cultural sensitivity and no biases.
6. Be prepared to continue developing their dental, community and world awareness through attending conventions, lectures, and workshops as well as active participation in professional/non-professional organizations.
7. Apply ethical and legal principles to the dental laboratory workplace and apply regulatory considerations related to bloodborne diseases.
8. Demonstrate work practices and safety protocols that promote a safe environment.
9. Secure employment as an entry-level restorative dental technologist.
10. Successfully challenge the Recognized Graduate Examination (first step in becoming a Board Certified Dental Laboratory Technologist as granted by the National Board for Certification in Dental Laboratory Technology).
11. Be prepared to transfer to a college or university for upper level studies in the health fields.

Requirements for the Certificate of Achievement (64 units)

Semester I

RDT 125A – Beginning Crown and Bridge (4)
RDT 130A – Beginning Complete Dentures (4)
RDT 135A – Beginning Dental Anatomy (2.5)
RDT 140A – Beginning Digital Dentistry CAD CAM I (1.5)
RDT 145 – Dental Materials (2)
RDT 150 – Dental Communication and Workplace Readiness Skills (0.5)

Semester II

RDT 125B – Advanced Crown and Bridge (5)
RDT 130B – Advanced Complete Dentures (5)
RDT 135B – Intermediate Dental Anatomy (2.5)
RDT 140B – Intermediate Digital Dentistry CAD CAM II (1.5)
RDT 155 – Anatomy of Oral and Facial Structures (1)
RDT 160 – Dental Calculations, Weights and Measures (0.5)

Semester III

RDT 225A – Beginning Removable Partial Dentures (RPDs) (4)
RDT 230A – Beginning Dental Ceramics (5)
RDT 235A – Functional Occlusion and Articulator Instrumentation (2.5)
RDT 240 – Advanced Digital Dentistry CAD CAM III (1.5)
RDT 245 – Orthodontics and Pedodontics (3)
RDT 250 – Laboratory Bus. Mgmt/ Admin, Legalities, Ethics and Jurisprudence (1)

Semester IV

RDT 225B – Advanced Removable Partial Dentures (RPDs) (3)
RDT 230B – Advanced Dental Ceramics (5)
RDT 235B – Advanced Functional Occlusion and Biomechanics of the Masticatory System (2.5)
RDT 255 – Introduction to Dental Implants (2)
RDT 260 – Transition to the Restorative Dental Technology Profession (1.5)
RDT 265 – Clinical Experience (3)

Recommended Electives

ART 025 – Beginning Sculpture (3)
ART 034A – Crafts–Materials and Processes (3)
BUS 013 – Business Lectures (1)
BUS 116 – Small Business Management (3)
COUN 010 – Introduction to College (1)
COUN 011 – Learning Strategies and College Skills Development (1)
COUN 012 – Personal Growth and Development (3)
COUN 017 – Career Planning (2)
DA 110 – Introduction to Dental Essentials (3)
ENGL 450 – Introduction to English Essentials (3)

Requirements for the Associate in Science Degree – see page 101.

DESIGN STUDIES

(Visual Arts and Media Studies Division)

Industrial Design – Occupational Skills Certificate

Top Code: 1009.00

The curriculum prepares students with some prior design background to seek entry-level employment/internship in the industrial design professions, which encompass product, transportation, environmental and entertainment design. Students also use portfolios for transfer application to four-year and graduate institutions. Innovation and the creative design process are the focus of the program. Completion of the program results in a portfolio of projects.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Understand the fundamental purpose of the industrial design professions and its integral role in the business world.
2. Create hands-on projects that demonstrate basic design processes which include problem definition, research, concept development and refinement, and final presentation.
3. Perform appropriate technical skills using professional tools, materials and processes for application to design projects and presentations.
4. Analyze, evaluate and improve designs through the critique process.

Requirements for the Occupational Skills Certificate (15 units):

Recommended sequence:

Semester I

ART 018 – Rendering (3)

Semester II

ART 033A – Product Design Application (3)

ART 118 – Advanced Rendering (3)

or ART 015 – Sketching For Design (3)

Semester III

ART 033B – Product Design Application (3)

Semester IV

ART 033C – Product Design Application (3)

Recommended Electives

ART 011A – Foundation Drawing (3)

ART 016 – Perspective (3)

ART 032A – Design–Three Dimensional (3)

ART 056 (DMA 012) – Introduction to Digital Painting & Drawing (3)

ART 155A (DMA 080A) – 3-D Modeling and Sculpting (3)

PHOT 030 – Introduction to Digital Image Editing (3)

Interior Design – Occupational Skills Certificate

Top Code: 1302.00

The curriculum prepares students to transfer to a 4-year Interior Design program or seek employment in the interior design industry as entry-level designers. Emphasis is on a solid foundation in the area of Interior Design. Students will develop a portfolio.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate a command of the vocabulary of the interior design field, and an understanding of the components of interior design.
2. Create original design projects that analyze, define, and solve problems in interior design, including space planning, materials and furnishings, design communication and visualization.
3. Utilize the critique process to analyze design solutions and the effectiveness of the visual communication of projects.
4. Create and present a portfolio of original student work that represents the necessary skills and an understanding of the principles and elements of design relative to the profession of interior design.

Requirements for the Occupational Skills Certificate (15 units):

ART 016 – Perspective (3)

ART 032A – Design–Three Dimensional (3)

ART 041A – Interior Design: Space Planning and Materials I (3)

ART 041B – Interior Design: Space Planning and Materials II (3)

ART 041C – Interior Design: Space Planning and Materials III (3)

Recommended Electives

ART 001A – History of Western Art–Prehistoric through Medieval (3)

ART 001B – History of Western Art (3)

ART 031A – Color and Composition–Two Dimensional Design (3)

ART 031B – Color Theory (3)

ART 033A – Product Design Application (3)

ART 040 (DMA 010) – Introduction to Digital Arts (3)

Jewelry/Metalworking – Occupational Skills Certificate

Top Code: 1009.10

This curriculum of design, metal fabrication, stone setting, and lost wax casting prepares students for entry-level employment in the jewelry design and manufacturing industry. This curriculum will also prepare the student seeking to transfer to a jewelry/metalworking program in a public or private four-year college.

An Occupational Skills Certificate is awarded upon the completion of all required courses with a grade of C or better.

Program outcomes:

1. Produce jewelry/objects that will demonstrate an understanding of basic design principles, stone setting, and jewelry/metalworking techniques.
2. Analyze and evaluate the jewelry/objects utilizing the critique process.

Requirements for the Occupational Skills Certificate (15 units):

Semester I

ART 034A – Crafts – Materials and Processes (3)

ART 036A – Jewelry/Metal Fabrication (3)

Semester II

ART 036B – Jewelry/Metal Fabrication (3)

Semester III

ART 036C – Jewelry Casting (3)

Semester IV

ART 135 – Portfolio Development of Jewelry and Metal Fabrication (3)

or ART 034B – Crafts – Materials and Processes (3)

Recommended Electives

ART 001A – History of Western Art–Prehistoric through Medieval (3)

ART 004D – History of Modern Art (3)

ART 015 – Sketching For Design (3)

ART 018 – Rendering (3)

ART 031A – Color and Composition–Two Dimensional Design (3)

ART 032A – Design–Three Dimensional (3)

ART 033A – Product Design Application (3)

ART 106 – Art Since 1945 (3)

PHOT 021 – Introduction to Black and White Photography (3)

Product Design – Associate in Science Degree, Certificate of Achievement

Top Code: 1013.00

The program prepares students with a portfolio to enter the product design profession as an entry-level designer. The courses develop a broad range of skills to seek employment in such diverse industries as product, transportation, environmental, entertainment and apparel/accessories design. Projects emphasize creativity, function, environmental, and social concerns.

Portfolios can also be used for transfer application to four-year and graduate programs.

A Certificate of Achievement is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Understand the innovative purpose of the product design profession and its integral role in the business world.
2. Create hands-on projects that demonstrate product design processes which include problem definition, research, concept development and refinement, and final presentation.
3. Analyze, evaluate and improve designs through the critique process.

Requirements for the Certificate of Achievement (33 units):

Recommended sequence:

Semester I

ART 015 – Sketching For Design (3)
ART 016 – Perspective (3)
ART 031A – Color and Composition–Two Dimensional Design (3)
DT 008A – Introduction to Digital Design & Fabrication (3)

Semester II

ART 018 – Rendering (3)
ART 033A – Product Design Application (3)
ART 050A (DMA 020A) – Introduction to Graphic Design & Advertising (3)

Semester III

ART 033B – Product Design Application (3)
ART 036A – Jewelry/Metal Fabrication (3)

Semester IV

ART 033C – Product Design Application (3)
 or ART 025 – Beginning Sculpture (3)
 or ART 038A – Ceramics (3)
 or FASH 001A – Fashion Survey (3)

Recommended Electives

ART 001A – History of Western Art–Prehistoric through Medieval (3)
ART 004D – History of Modern Art (3)
ART 011A – Foundation Drawing (3)
ART 026 – Sculpture (3)
ART 027 – Sculpture Technology–Metal Casting and Mold Making (3)
ART 031A – Color and Composition–Two Dimensional Design (3)
ART 034A – Crafts – Materials and Processes (3)
ART 034B – Crafts – Materials and Processes (3)
ART 036B – Jewelry/Metal Fabrication (3)
ART 036C – Jewelry Casting (3)
ART 038B – Ceramics (3)
ART 038C – Ceramics (3)
ART 050B (DMA 020B) – Intermediate Graphic Design & Advertising (3)
ART 050C (DMA 020C) – Advanced Graphic Design & Advertising (3)
ART 110A – Skills for Success in Design Digital Media (1)
ART 118 – Advanced Rendering (3)
BUS 002 – Personal Finance (3)
BUS 009 – Introduction to Business (3)
BUS 010 – Introduction to Management (3)
BUS 011A – Business Communications (3)
DT 008B – Intermediate Digital Design and Fabrication (3)
DT 008C – Advanced Systems Design & Fabrication (4)
DT 118 – A/E/C Modeling (3)

ENGR 002 – Descriptive Geometry (3)
ENGR 015A – Applied Mechanics–Statics (3)
MACH 220A – Introduction to Manufacturing Technology (3)
MRKT 020 – Principles of Marketing (3)
MRKT 133 – Marketing Trends (3)
PHOT 021 – Introduction to Black and White Photography (3)
WELD 044A – Introduction to Gas Welding (1)

Requirements for the Associate in Science Degree – see page 101.

Product Design – Graphics – Associate in Science Degree, Certificate of Achievement

Top Code: 1013.00

The program prepares students with an interest and strengths in graphics with a portfolio to enter the product design profession as an entry-level designer. The courses develop a focused range of knowledge and skills to seek employment with an emphasis on graphic application related to products. Projects emphasize creativity, function, environmental, and social concerns in addition to technical skills.

Portfolios can also be used for transfer application.

Completion of all courses with a grade of C or better is required for the certificate.

Program Outcomes:

1. Understand the fundamental purpose of graphic design with application to product design.
2. Create projects that demonstrate product-graphic design processes which include branding/identity, packaging, computer assisted drawing and painting.
3. Analyze, evaluate and improve designs through the critique process.

Requirements for the Certificate of Achievement (33 units):

Recommended sequence:

Semester I

ART 015 – Sketching For Design (3)
ART 016 – Perspective (3)
ART 031A – Color and Composition–Two Dimensional Design (3)

Semester II

ART 018 – Rendering (3)
ART 033A – Product Design Application (3)
ART 050A (DMA 020A) – Introduction to Graphic Design & Advertising (3)

Semester III

ART 033B – Product Design Application (3)
ART 051A (DMA 022A) – Typography – Lettering (3)
ART 056 (DMA 012) – Introduction to Digital Painting & Drawing (3)

Semester IV

ART 033C – Product Design Application (3)
PHOT 030 – Introduction to Digital Image Editing (3)

Recommended Electives

ART 001A – History of Western Art–Prehistoric through Medieval (3)

ART 011A – Foundation Drawing (3)

PHOT 021 – Introduction to Black and White Photography (3)

Requirements for the Associate in Science Degree – see page 101.

Product Design – Technology – Associate in Science Degree, Certificate of Achievement

Top Code: 1013.00

The program prepares students with an interest and strengths in technology with a portfolio to enter the product design profession as an entry-level designer. The courses develop a focused range of knowledge and skills to seek employment as a product designer with an emphasis on production. Projects emphasize creativity, function, environmental, and social concerns in addition to technical skills.

Portfolios can also be used for transfer application.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Discuss the technical aspects of the industrial design profession.
2. Create hands-on projects that demonstrate basic technical design processes which include computer-aided drafting (CAD) and 3-dimensional modeling and animation.
3. Analyze, evaluate and improve design projects through the critique process.

Requirements for the Certificate of Achievement (36 units):

Recommended sequence:

Semester I

ART 015 – Sketching For Design (3)

ART 016 – Perspective (3)

ART 031A – Color and Composition–Two Dimensional Design (3)

Semester II

ART 018 – Rendering (3)

ART 033A – Product Design Application (3)

DT 008A – Introduction to Digital Design & Fabrication (3)

Semester III

ART 033B – Product Design Application (3)

PHOT 030 – Introduction to Digital Image Editing (3)

DT 017 – Building Construction Technical Graphics (3)

Semester IV

ART 033C – Product Design Application (3)

ART 085A (DMA 080A) – 3D Modeling & Sculpting (3)

or ART 155A (DMA 080A)– 3-D Modeling and Sculpting (3)

Recommended Electives

ART 001A – History of Western Art–Prehistoric through Medieval (3)

ART 011A – Foundation Drawing (3)

PHOT 021 – Introduction to Black and White Photography (3)

Requirements for the Associate in Science Degree – see page 101.

DESIGN TECHNOLOGY

(Engineering & Technology Division)

CAD Designer – Architecture/Engineering/Construction – *Occupational Skills Certificate*

Top Code: 0953.10

The curriculum prepares students to be advanced users of three dimensional Computer-Aided Design – CAD and Building Information Modeling – BIM systems to solve building and construction design problems using the principles and standards of Sustainable Technology. A CAD Designer leads design activities with knowledge of sustainable production processes and industry standards. Job functions include interpreting building codes, LEED and current industry sustainability standards, formulas or data for engineering design, geometric problem solving, presentations of design reviews, and collaborating in design projects. This course of study prepares participants for successful completion of LEED accreditation at the Associates Level.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an ability to communicate effectively using technical, graphical, oral and written formats.
2. Demonstrate appropriate mastery of industry technical graphic standards, Computer-Aided Design, Building Information Modeling strategies and techniques, and rapid prototyping and sustainable technologies in the design and representation of architectural, engineering and construction systems
3. Demonstrate appropriate mastery of industry technical graphical standards in the critical analysis of technical graphics and digital prototypes of architectural, engineering and construction systems or processes.
4. Collaborate effectively in teams to produce comprehensive design technology solutions to architectural, engineering and construction systems and processes.

Requirements for the Occupational Skills Certificate (12 units):

DT 017 – Building Construction Technical Graphics (3)

DT 110 – Sustainable Technologies (3)

DT 114 – Building Information Modeling Design (BIM Design) (3)

DT 118 – A/E/C Modeling (3)

CAD Modeling and Animation – Architecture/Engineering/Construction – *Occupational Skills Certificate*

Top Code: 0953.10

The curriculum prepares students to apply CAD systems to model industry specific architectural and engineering projects. Job functions include creating models of engineering designs and structures, creating associative drawings to models, generating computerized visualizations of architectural models.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate appropriate fluency of industry specific drawing standards and Computer-Aided-Design techniques in the development of architectural plans.
2. Demonstrate appropriate mastery of industry specific drawing standards through the analysis of written and tabular code data, and building processes.
3. Demonstrate an ability to effectively communicate through the use of two-dimensional appropriate and three-dimensional graphics, oral and written presentations.
4. Perform basic mathematical calculations in units of measure consistent with the architectural/engineering/construction industry.

Requirements for the Occupational Skills Certificate (12 units):

Semester I

DT 008A – Introduction to Digital Design & Fabrication (3)

Semester II

DT 017 – Building Construction Technical Graphics (3)

Semester III

DT 114 – Building Information Modeling Design (BIM Design) (3)

DT 118 – A/E/C Modeling (3)

CAD Technician – Architecture/Engineering/Construction – *Occupational Skills Certificate*

Top Code: 0953.10

The curriculum prepares students to be functional within two-dimensional CAD systems used in the architecture/engineering/construction industry. A CAD technician is an entry level position working in a team of architects or engineers. Job functions would include generating drawings from existing designs, plotting drawings, and electronic file handling and file management.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate appropriate mastery of basic orthographic projection techniques.
2. Demonstrate an ability to effectively communicate through the use of two-dimensional graphics, oral and written presentations.
3. Perform basic mathematical calculations in units of measure consistent with the architectural/engineering/construction industry.

Requirements for the Occupational Skills Certificate (9 units):

Semester I

DT 008A – Introduction to Digital Design & Fabrication (3)

TECH 107A – Technical Calculations (3)

Semester II

DT 017 – Building Construction Technical Graphics (3)

CAD Technician – Mechanical Design and Manufacturing – *Occupational Skills Certificate*

Top Code: 0953.40

The curriculum prepares students to read and create technical graphics and design and produce digital prototypes for the design of mechanical components within a manufacturing process. Technologies utilized in the program include parametric solid modeling CAD systems to generate 3D models, technical graphics and analysis, and to produce laser cut and 3D printed mechanical prototypes. Interpretation of engineering drawings is based on American Society of Mechanical Engineers (ASME) Y14 standards.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an ability to communicate effectively using technical, graphical, oral and written formats.
2. Demonstrate appropriate mastery of industry technical graphic standards. Computer-Aided Design techniques, sustainable technology and rapid prototyping and additive production technologies in the design of components, systems or processes of mechanical design.
3. Demonstrate appropriate mastery of industry technical graphical standards in the analysis of technical graphics and digital prototypes of mechanical design components, systems or processes.
4. Collaborate effectively in teams to produce comprehensive design technology solutions to mechanical and manufacturing processes and systems.

Requirements for the Occupational Skills Certificate (13 units):

DT 008A – Introduction to Digital Design & Fabrication (3)
DT 008B – Intermediate Digital Design and Fabrication (3)
DT 008C – Advanced Systems Design & Fabrication (4)
DT 110 – Sustainable Technologies (3)

Design Technology Mechanical + Manufacturing – *Certificate of Achievement, Associate in Science Degree*

Top Code: 0953.00

The Design Technology Mechanical + Manufacturing program prepares students to work in mechanical design, industrial design, or manufacturing areas as entry level designers, virtual and rapid prototype builders, or Computer Aided Design (CAD)/Computer Aided Manufacturing (CAM) technicians. The program builds on the CAD Technician – Mechanical Design & Manufacturing Occupational Skills Certificate and leads to the Associate of Arts Degree in Engineering and Technology, as well as providing a transfer pathway to Baccalaureate programs in Engineering Technology.

The emphasis is on creating original solutions to engineering design technology problems through rigorous design and prototyping processes, using digital rapid prototyping technologies, within a collaborative, project-based environment consistent with advanced manufacturing industry demands of a globalized, sustainable economy.

With a focus on communication skills and creative critical thinking, entry level students develop engineering design solutions through research, prototyping, analysis and evaluation in an iterative process involving preliminary sketching, 2D and 3D CAD drawing and parametric modeling, rapid prototyping using 3D printing, laser and plasma cutting, CNC milling and forming, micro controllers and mechatronics. Advanced students develop complex design solutions integrating multiple technologies and procedures for real world application in competitions, entrepreneurial ventures and startups in an industry incubator model.

The program includes integrated, contextualized academics, industry credentialing, interdisciplinary collaboration, professional development and work experience opportunities to develop long term transferable skills sets aligned to work force needs evidenced through advisory groups and industry engagement. Graduating students work under the supervision of qualified engineers, industrial designers, product designers or advanced manufacturing technicians at professional offices meeting customer requirements and deadlines by realizing products in a production system.

This program prepares students for entry into high demand fields in advanced manufacturing, industrial design, engineering and specialized fabrication areas from aerospace to entertainment and medical technology.

A Certificate of Achievement is awarded upon completion of all courses with a grade of C or better.

Program Outcomes:

1. Apply design technology principles and processes to create original, comprehensive solutions to complex engineering design and fabrication problems.
2. Utilize appropriate technologies and techniques to produce complex iterative prototypes within a digital workflow to meet industry standards and criteria.
3. Communicate effectively using audience appropriate technical, graphical, oral and written formats in the critical evaluation of processes and products.
4. Collaborate effectively in diverse teams to identify, analyze and solve technical problems of contemporary professional, societal and global importance.

Requirements for the Certificate of Achievement (18–29.5 units):

DT 008A – Introduction to Digital Design & Fabrication (3)
DT 008B – Intermediate Digital Design and Fabrication (3)
DT 008C – Advanced Systems Design Fabrication (4)
ENGL 001A – Reading and Composition (4)
 or SPCH 001 – Fundamentals of Speech (3)
 or SPCH 010 – Interpersonal Communication (3)
TECH 107A – Technical Calculations (3)
 or MATH 131 – Intermediate Algebra for Stem (5.5)

Required Electives – Select 2-3 units to meet 18 units requirement from the following:

ARCH 014 – Materials and Processes of Construction (2)
ART 033A – Product Design Application (3)
ART 036A – Jewelry/Metal Fabrication (3)
DT 101 – Fabrication Laboratory (2)
DT 105 – Emerging Applied Technologies (2)
DT 110 – Sustainable Technologies (3)
ELTN 130 – Introduction to Electronics (3)
FASH 001A – Fashion Survey (3)
MACH 101 – Beginning Metalworking Skills (3)
MIT 101 – Introduction to Robotics (4)
WELD 200A – Introduction to Welding (10)

Requirements for the Associate in Science Degree – see page 101.

DIGITAL MEDIA

(Visual Arts and Media Studies Division)

Digital Media – Animation & Motion Arts – Associate in Science Degree, Certificate of Achievement

Top Code: 0614.40

Animation and Motion Arts teaches entry level animation skills for a variety of fields including entertainment, game design, the web, advertising, broadcasting, social media, and mobile apps. Using industry-standard 2D and 3D animation technologies, students develop professional skills for creative expression and visual storytelling. Students will develop a portfolio and participate in a shared incubator course with all Design/Media Arts students.

Required: Students must select 3 courses (9 units) from any of the emphases to complete the certificate. All courses in this certificate require literacy and proficiency in writing and math. Projects require written, oral, and visual presentations as well as the application of basic math principles and skills.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Develop original animations using foundational creative processes, principles of design, principles of animation, and digital techniques.
2. Identify essential industry skills, explore their applications, and use learning resources to identify practical approaches to problem-solving.
3. Strategize and manage efficient design and production workflows.
4. Demonstrate the ability to work in teams effectively.
5. Communicate through animated content effectively with appropriate verbal, written and visual techniques.

Requirements for the Certificate of Achievement (21 units):

Required Foundation Courses

DMA 002 – History of Design and Media Arts (3)

or DMA 004 – History of Digital Games (3)

DMA 012 (ART 056) – Digital Art: Painting & Drawing (3)

DMA 070 (ART 057) – Motion Graphics (3)

or DMA 072 (ART 070) – 2D Animation (3)

Options for 3D Animation

DMA 080A (ART 085A) – 3D Modeling & Sculpting (3)

DMA 080B (ART 085B) – 3D Animation & Simulations (3)

DMA 092 (ART 081) – Game Design II: Game Engines (3)

Options for Illustration & 2D Animation

ART 012A – Beginning Life Drawing (3)

ART 052A – Introduction to Illustration (3)

ART 052B – Advanced Illustration (3)

Options For Interactive Animation

DMA 090 (ART 080) – Game Design I (3)

DMA 092 (ART 081) – Game Design II: Game Engines (3)

DMA 060 (ART 060) – Creative Coding (3)

Required Capstone Course

DMA 098 (ART 180) – Design/Media Arts Incubator (3)

Recommended Electives

ART 011A – Foundation Drawing (3)
ART 015 – Sketching for Design (3)
ART 031A – Color and Composition-Two Dimensional Design (3)
BUS 116 – Entrepreneurship (3)
CINE 026A – Beginning Electronic Filmmaking (3)
DMA 020A (ART 050A) – Graphic Design I (3)
DMA 050 (ART 098) – Web Design & Development (3)
DMA 062 (ART 059) – Creative Coding for The Internet (3)
DMA 064 (ART 061) – Creative Coding for Mobile Devices (3)
SPCH 001 – Fundamentals of Speech (3)
 or SPCH 001H – Honors Fundamentals of Speech (3)
SPCH 010 – Interpersonal Communication (3)
TVR 002A – Beginning Audio Production (3)
TVR 019 – Introduction to Media Aesthetics and Cinematic Arts (3)

Requirements for the Associate in Science Degree – see page 101.

Digital Media – Design/Media Arts Foundation – Associate in Science Degree, Certificate of Achievement

Top Code: 0614.00

The Design/Media Arts Foundation certificate lays the foundation for student-success in PCC's Design/Media Arts and Photography departments. It is the first step toward successful entry into the labor market. Geared toward students interested in creative coding, graphic design, interaction design, web design, motion graphics, photography and game design. Skills covered will be basic coding (HTML/CSS), production processes, design thinking, project management and collaborative teamwork.

All courses in this certificate require literacy and proficiency in writing and math. Projects require written, oral, and visual presentations as well as the application of basic math principles and skills.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Apply the elements and principles of design in finished digital images and time-based works.
2. Produce digital images and time-based work through various digital media input and output methods.
3. Examine and describe contemporary approaches, language, aesthetics in digital media.
4. Evaluate and critique digital images and time-based media works utilizing relevant terminology and concepts.
5. Demonstrate competence in the use of tools, materials, and concepts for creating original art and design projects.

Requirements for the Certificate of Achievement (21 units):

Recommended sequence:

Semester I

COLL 001 – First Year Seminar (3)
ART 011A – Foundation Drawing (3)
ART 031A – Color and Composition-Two Dimensional Design (3)
DMA 010 (ART 040) – Digital Art: Design Foundation (3)

Semester II

DMA 020A (ART 050A) – Graphic Design I (3)
DMA 012 (ART 056) – Digital Art: Painting & Drawing (3)
DMA 050 (ART 098) – Web Design & Development (3)

Recommended Electives

DMA 002 – History of Design and Media Arts (3)
DMA 004 – History of Digital Games (3)
BUS 116 – Entrepreneurship (3)
SPCH 001 – Fundamentals of Speech (3)
or SPCH 001H – Honors Fundamentals of Speech (3)
SPCH 010 – Interpersonal Communication (3)

Requirements for the Associate in Science Degree – see page 101.

Digital Media – Game Design & Development – Associate in Science Degree, Certificate of Achievement

TOP Code: 0614.20

Game Design and Development is a field that combines interactive, visual storytelling with complex game mechanics. Certificate recipients will learn entry-level skills in ideation, storyboarding, game design, playtesting, and computer programming with industry-standard game engines. Students will learn project management and collaboration skills. Students will develop a portfolio and participate in a shared incubator course with all Design/Media Arts students.

All courses in this certificate require literacy and proficiency in writing and math. Projects require written, oral, and visual presentations as well as the application of basic math principles and skills.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Develop original game designs using foundational creative processes, principles of game design and game development technologies.
2. Identify essential industry competencies and explore applications and learning resources to identify practical approaches to problem-solving.
3. Strategize and manage efficient design and production workflows.
4. Demonstrate the ability to work in teams effectively.
5. Communicate game designs effectively through appropriate verbal, written and visual techniques.

Requirements for the Certificate of Achievement (24 units):**Semester I**

DMA 004 – History of Digital Games (3)
DMA 012 (ART 056) – Digital Art: Painting & Drawing (3)
DMA 090 (ART 080) – Game Design I (3)

Semester II

DMA 070 (ART 057) – Motion Graphics (3)
or DMA 072 (ART 070) – 2D Animation (3)
DMA 080A (ART 085A) – 3D Modeling & Sculpting (3)
or DMA 080B (ART 085B) – 3D Animation & Simulations (3)
DMA 092 (ART 081) – Game Design II: Game Engines (3)

Semester III

DMA 032 (ART 064) – Interaction Design (3)
or DMA 034 (ART 063) – User Experience Design (UX) (3)
DMA 098 (ART 180) – Design/Media Arts Incubator (3)

Recommended Electives

ANTH 002 – Cultural Anthropology (3)
or ANTH 002H – Honors Cultural Anthropology (3)
BUS 116 – Entrepreneurship (3)
COLL 001 – First Year Seminar (3)
DMA 002 – History of Design and Media Arts (3)
DMA 050 (ART 098) – Web Design & Development (3)
DMA 060 (ART 060) – Creative Coding (3)
DMA 062 (ART 059) – Creative Coding for the Internet (3)
DMA 064 (ART 061) – Creative Coding for Mobile Devices (3)
PSYC 001 – Introductory Psychology (3)
or PSYC 001H – Honors Introductory Psychology (3)
SPCH 001 – Fundamentals of Speech (3)
or SPCH 001H – Honors Fundamentals of Speech (3)
SPCH 010 – Interpersonal Communication (3)

Requirements for the Associate in Science Degree – see page 101-

Digital Media – Graphic Design – Associate in Science Degree, Certificate of Achievement

Top Code: 1030.00

The field of graphic design involves bringing ideas to the printed page or screens. Concepts covered include design history, page layout, typography, research, branding, and interaction design/user experience (UX). Students will develop a portfolio and participate in a shared incubator course with all Design/Media Arts students.

All courses in this certificate require literacy and proficiency in writing and math. Projects require written, oral, and visual presentations as well as the application of basic math principles and skills.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Understand and apply the vocabulary of the graphic design field, design research, and the process of design thinking.
2. Create advanced original design projects that analyze, define, and solve problems in visual communications.
3. Utilize the critique process and research to analyze the effectiveness of visual communications on graphic design projects.
4. Apply knowledge of page layout software to produce graphic design projects.
5. Create and present a portfolio of original student work that reflects an advanced understanding of visual communication and design principles.

Requirements for the Certificate of Achievement (24 units):

Required Courses

Semester I

DMA 002 – History of Design and Media Arts (3.0 Units)
DMA 010 (ART 040) – Digital Art: Design Foundation (3.0 Units)
ART 031A – Color and Composition-Two Dimensional Design (3.0 Units)

Semester II

DMA 020A (ART 050A) – Graphic Design I (3)
DMA 022A (ART 051A) – Typography I (3)
DMA 032 (ART 064) – Interaction Design (3)
or DMA 034 (ART 063) – User Experience Design (UX) (3)

Semester III

DMA 020B (ART 050B) – Graphic Design II (3)
DMA 098 (ART 180) – Design/Media Arts Incubator (3)

Recommended Electives

ART 011A – Foundation Drawing (3)
BUS 002 – Personal Finance (3)
BUS 009 – Introduction to Business (3)
BUS 010 – Introduction to Management (3)
BUS 011A – Business Communications (3)
BUS 116 – Entrepreneurship (3)
CINE 026A – Beginning Electronic Filmmaking (3)
COLL 001 – First Year Seminar (3)
DMA 012 (ART 056) – Digital Art: Painting & Drawing (3)
DMA 022B (ART 051B) – Typography II (3)
DMA 050 (ART 098) – Web Design & Development (3)
DMA 060 (ART 060) – Creative Coding (3)
DMA 062 (ART 059) – Creative Coding for The Internet (3)
DMA 064 (ART 061) – Creative Coding for Mobile Devices (3)
DMA 070 (ART 057) – Motion Graphics (3)
MRKT 020 – Principles of Marketing (3)
MRKT 123 – Promotions and Marketing Communications (3)
MRKT 150 – Social Media Marketing for Business (3)
SPCH 001 – Fundamentals of Speech (3)
or SPCH 001H – Honors Fundamentals of Speech (3)
SPCH 010 – Interpersonal Communication (3)

Requirements for the Associate in Science Degree – see page 101.

Digital Media – Interactive Art & Design – *Associate in Science Degree, Certificate of Achievement*

Top Code: 0614.00

Interactive Art & Design is a field where art and design practices meet technology. Entry-level employment in fields like web design, interaction design, graphic design, game design, creative coding, entertainment, and mobile apps. Emphasis on interdisciplinary teamwork and collaboration. Students will develop a portfolio and participate in a shared incubator course with all Design/Media Arts students.

Required: Students must select 3 courses (9 units) from any of the emphases to complete the certificate.

All courses in this certificate require literacy and proficiency in writing and math. Projects require written, oral, and visual presentations as well as the application of basic math principles and skills.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Develop original interactive art and design content using foundational creative process, principles of interactivity, and appropriate techniques.
2. Identify essential industry competencies and explore applications and learning resources to identify practical approaches to problem-solving.
3. Strategize and manage efficient design and production workflows.
4. Demonstrate the ability to work in teams effectively.
5. Communicate interactive art and design projects effectively through appropriate verbal, written and visual techniques.

Requirements for the Certificate of Achievement (21 units):

Required Foundation Courses

DMA 002 – History of Design and Media Arts (3)

or DMA 004 – History of Digital Games (3)

DMA 012 (ART 056) – Digital Art: Painting & Drawing (3)

DMA 070 (ART 057) – Motion Graphics (3)

or DMA 072 (ART 070) – 2D Animation (3)

Options for Web Design & Development

DMA 050 (ART 098) – Web Design & Development (3)

DMA 032 (ART 064) – Interaction Design (3)

DMA 062 (ART 059) – Creative Coding for The Internet (3)

Options for Interaction Design & User Experience (UX)

DMA 032 (ART 064) – Interaction Design (3)

DMA 034 (ART 063) – User Experience Design (UX) (3)

DMA 064 (ART 061) – Creative Coding for Mobile Devices (3)

Options for Game Design & Development

DMA 090 (ART 080) – Game Design I (3)

DMA 092 (ART 081) – Game Design II: Game Engines (3)

DMA 080A (ART 085A) – 3D Modeling & Sculpting (3)

or DMA 080B (ART 085B) – 3D Animation & Simulations (3)

Options for Creative Coding

DMA 060 (ART 060) – Creative Coding (3)

DMA 062 (ART 059) – Creative Coding for The Internet (3)

DMA 064 (ART 061) – Creative Coding for Mobile Devices (3)

Required Capstone Course

DMA 098 (ART 180) – Design/Media Arts Incubator (3)

or ART 075 – Exhibition and Presentation of Visual Art (3)

Recommended Electives

ART 011A – Foundation Drawing (3)
ART 015 – Sketching for Design (3)
ART 031A – Color and Composition-Two Dimensional Design (3)
BUS 116 – Entrepreneurship (3)
CINE 026A – Beginning Electronic Filmmaking (3)
DMA 020A (ART050A) – Graphic Design I (3)
SPCH 001 – Fundamentals of Speech (3)
 or SPCH 001H – Honors Fundamentals of Speech (3)
SPCH 010 – Interpersonal Communication (3)
TVR 002A – Beginning Audio Production (3)
TVR 019 – Introduction to Media Aesthetics and Cinematic Arts (3)

Requirements for the Associate in Science Degree – see page 101.

Digital Media –Web Design & Development – Associate in Science Degree, Certificate of Achievement

Top Code: 0614.30

This curriculum prepares students for entry-level positions in web design and development, creative coding, front-end web and mobile application design, interaction design or UX (User Experience) design. The program stresses the design thinking process as well as the professional and production methods used currently in industry. Projects will encompass content management, user interface, interactive behaviors, information design, web and mobile application tools, programming, and selection of appropriate form factors for user experiences in the Internet. Students will develop a portfolio and participate in a shared incubator course with all Design/Media Arts students.

All courses in this certificate require literacy and proficiency in writing and math. Projects require written, oral, and visual presentations as well as the application of basic math principles and skills.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Design implement, publish, and maintain websites, using authoring or scripting languages, content creation tools, management tools and a variety of digital media assets.
2. Research, problem-solve, and organize a consistent and functional website, mobile application, or user experience for a targeted user group or persona using agile and iterative methodologies.
3. Evaluate and create code that is valid, properly structured, meets industry standards, and is accessible and compatible with browsers, mobile devices and/or operating systems.
4. Demonstrate the ability to work in teams effectively.
5. Demonstrate project management skills and practices that emphasize content development in all aspects of web design, user interface, interaction design, information design, database design, and front end development.

Requirements for the Certificate of Achievement (21 units):

Recommended Sequence:

Semester I

DMA 010 – Digital Art: Design Foundation (3)
DMA 012 – Digital Art: Painting & Drawing (3)
DMA 050 (ART 098) – Web Design & Development (3)

Semester II

DMA 032 (ART 064) – Interaction Design (3)
DMA 034 (ART 063) – User Experience Design (UX) (3)
DMA 060 (ART 060) – Creative Coding (3)
or DMA 062 (ART 059) – Creative Coding for The Internet (3)
or DMA 064 (ART 061) – Creative Coding for Mobile Devices (3)

Semester III

DMA 098 (ART 180) – Design/Media Arts Incubator (3)

Recommended Electives

ART 011A – Foundation Drawing (3)
ART 015 – Sketching for Design (3)
ART 031A – Color and Composition-Two Dimensional Design (3)
CINE 026A – Beginning Electronic Filmmaking (3)
COLL 001 – First Year Seminar (3)
DMA 002 – History of Design and Media Arts (3)
DMA 004 – History of Digital Games (3)
DMA 020A (ART 050A) – Graphic Design I (3)
DMA 020B (ART 050B) – Graphic Design II (3)
DMA 022A (ART 051A) – Typography I (3)
DMA 022B (ART 051B) – Typography II (3)
SPCH 001 – Fundamentals of Speech (3)
or SPCH 001H – Honors Fundamentals of Speech (3)
SPCH 010 – Interpersonal Communication (3)

Requirements for the Associate in Science Degree – see page 101.

ECONOMICS

(Social Sciences Division)

Economics – Associate in Arts Degree for Transfer to CSU

Economics is a social science discipline concerned chiefly with description, theory and analysis of production, distribution, and consumption of goods and services. Economics is concerned with rational consumers making choices under conditions of scarcity. Students will be introduced to concepts and tools of economic analysis including theory of demand and supply, national income accounting, economic growth and business cycle. Students will have the ability to analyze fiscal, monetary and trade policies. In addition, students will be introduced to the theory of consumer behavior, the theory of firms under various market structures and the theory of resource markets. The Associate in Arts in Economics for the Transfer Degree is designed to prepare the student for seamlessly transferring to the CSU to earn a baccalaureate degree in economics and is designed to provide students a clear transfer pathway to the CSU and the completion of a baccalaureate degree, with guaranteed admission to a CSU to a similar major with junior standing, and the ability to complete their remaining requirements within 60 semester or 90 quarter units.

Associate Degree for Transfer Requirements

- 60 semester or 90 quarter CSU-transferable units.
- the California State University-General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC for CSU) pattern.

- a minimum of 20 semester or 30 quarter units in the major or area of emphasis as determined by the community college district.
- obtainment of a minimum grade point average (GPA) of 2.0.
- earn a grade of C or better in all courses required for the major or area of emphasis.

Program Outcomes:

1. Use the theory of demand and supply to explain market equilibrium and the effects of government interventions.
2. Demonstrate the theory of consumer behavior to derive the demand curve.
3. Identify, analyze and evaluate fiscal and monetary theory and policy.
4. Identify the various market structures; demonstrate the firm's decisions under different market structures; evaluate the effects of government intervention.
5. Apply the theory of comparative advantage to evaluate gains from international trade and effects of government intervention.

REQUIRED COURSES (14-15 units)

ECON 001A – Principles of Economics (3)
 ECON 001B – Principles of Economics (3)
 STAT 050 – Elementary Statistics (4)
 or STAT 015 - Statistics for Business and Economics (4)
 or STAT 018 - Statistics for Behavioral and Social Sciences (4)
 BUS 014B - Mathematical Analysis for Business – Calculus (4)
 or MATH 005A – Single Variable Calculus I (5)

LIST A: Select one course (3 - 5 units)

BUS 014A – Mathematical Analysis for Business – Finite (4)
 MATH 005B – Single Variable Calculus II (5)
 ACCT 001A – Financial Accounting (5)
 ACCT 001B – Managerial Accounting (4)
 BIT 025 – Survey of Computer Technology (3)
 BUS 011A – Business Communication (3)

LIST B: Select one course from below or from any list A course not used (3-5 units)

MATH 005C – Multivariable Calculus (5)
 MATH 010 – Linear Algebra and Applications (5)

REQUIRED SUBTOTAL.....	20-25
CSU General Education or IGETC CSU Pattern.....	37-39
DEGREE TOTAL	60

EDUCATION

(Social Sciences Division)

Elementary Teacher Education - Associate in Arts Degree for Transfer to CSU

The Associate in Arts in Elementary Teacher Education for Transfer Degree is designed for future elementary or special education teachers. The study of Education prepares students to take leadership roles in strengthening schools, advancing research and scholarship, and improving education policy. The AA-T in Elementary Teacher Education fosters exploration of a broad range of topics in the field of education and provides a strong foundation for students who aspire to become teachers in Pre K-12 schools or college and offers preparation for aspiring teachers who are considering Credential Programs.

Credential programs prepare students to become professional educators, integrating the tools of theory and research to improve classroom practice. The AA-T degree in Elementary Teacher Education prepares future elementary or special education teachers.

Completion of an approved California community college Associate in Arts degree in Elementary Teacher Education will satisfy CSU's Liberal Studies B.A. degree major preparation courses at several schools. Or, students may prepare for the Child Development major at various CSU schools. Students may also prepare for the Urban Learning or Mexican American Studies majors at CSULA and for the Gender, Ethnicity, and Multicultural Studies major at Cal Poly – Pomona.

The Associate in Arts for Transfer Degree in Elementary Teacher Education degree requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.
3. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. All courses in the major must be completed with a grade of "C" or better.
6. A "P" (Pass) grade is not acceptable grade for courses in the major. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Program Outcomes:

1. Demonstrate critical thinking skills, specifically in relation to a liberal arts curriculum.
2. Demonstrate an understanding of the ways that a liberal arts education helps to illuminate the human condition.
3. Demonstrate reading skills relevant to liberal arts study.
4. Demonstrate writing skills relevant to liber

Associate in Arts in Elementary Teacher Education for Transfer Degree

REQUIRED CORE: 44 UNITS

BIOL 011 – General Biology (4)
or BIOL 011H – Honors General Biology (4)
EDUC 013 – Teacher Preparation Foundations and Field Experience (3)
ENGL 001A – Reading and Composition (4)
or ENGL 001AH – Honors Reading and Composition (4)
or ENGL 001AS – Stretch Accelerated Reading and Composition (4)
ENGL 001B – Reading and Composition (4)
or ENGL 001BH – Honors Reading and Composition (4)
GEOG 003 – World Regional Geography (3)
GEOL 003 – Earth and Space Science (4)
HIST 002A – History of World Civilizations to 1500 (3)
HIST 007A – United States History to 1876 (3)
MATH 038 – Foundations of Elementary School Mathematics (3)
PHSC 003 – Physical Sciences (3)
and PHSC 003L - Laboratory for Physical Sciences (1)
POLS 001 – Introduction to American Government and Politics (3)
PSYC 021 – Developmental Psychology: The Child (3)
or PSYC 021H – Honors Developmental Psychology: The Child (3)
SPCH 001 – Fundamentals of Speech (3)
or SPCH 001H – Honors Fundamentals of Speech (3)

LIST A: SELECT 1 COURSE FROM THE FOLLOWING: (3-4 UNITS)

ENGL 001C – Intermediate Composition- Critical Thinking (4)
PHIL 025 – Introduction to Critical Thinking (3)
PHSC 002 – Scientific Method as Critical Thinking (3)
SPCH 012 – Argumentation and Critical Thinking (3)

LIST B: SELECT ONE COURSE FROM BELOW (3 UNITS)

ART 001A – History of Western Art (3)
ART 001B – History of Western Art (3)
ART 005 – Art Fundamentals (3)
DANC 021A – Dance History: Cultural and Social Heritage (3)
DANC 021B – Dance History: Spectacle and Performance Art (3)
MUSC 021 – Music Appreciation (3)
THRT 001 – Introduction to Theatre (3)

LIST C: SELECT UP TO 9 ADDITIONAL UNITS

Any course(s) not selected above, and/or any courses chosen from the following lists. The lists have been developed with the intent of preparing students to enter a Multiple Subject Teaching Credential program and to take the California Subject Examination for Teachers (CSET) and the California Basic Educational Skills Test (CBEST).

For the Liberal Studies major at CSULA, CSUN, CSUF, CSULB, or CPP, and/or the Urban Learning major at CSULA: Consult with Assist.org for the listing appropriate for the specific school.

ENGL 005A – Creative Writing (3)
ENGL 030A – American Literature (3)
ENGL 030B – American Literature (3)
ENGL 030C – American Literature (3)
ENGL 044B – World Literature: 1500–1800 A.D. (3)
ENGL 044C – World Literature: 1800–Mid 20TH Century (3)
ENGL 046A – English Literature (3)
ENGL 046B – English Literature (3)
ENGL 059 – Children’s Literature (3)
HIST 008 – History of California (3)
HIST 002B – History of World Civilizations from 1500 (3)
HIST 007B – United States History from 1876 (3)
HUM 001 – Introduction to Humanities (3)
LING 010 – Introduction to Linguistics (3)
 or ENGL 010 – Introduction to Linguistics (3)
PHIL 001 – Introduction to Philosophy (3)
 or 001H – Honors Introduction to Philosophy (3)
RELG 001 – Religious Studies (3)

For the Child Development major at CSULA, CSUN, CSUF, CSULB, or CPP: Consult with Assist.org for the listing appropriate for the specific school.

ANTH 002 – Cultural Anthropology (3)
CHDV 010 – Principles and Practices of Teaching Young Children (3)
CHDV 011 – Infant and Toddler Development (3)
CHDV 013A - Practicum in Child Development – A (2)
 and CHDV 013AF – Field Practice in Child Development – A (2)
CHDV 013B – Practicum in Child Development – B (2)
 and CHDV 013BF – Field Practice in Child Development – B (2)

CHDV 014 – Observation and Assessment of Young Children (3)
 CHDV 015 – Child, Family, and Community (3)
 CHDV 016 – Health, Safety, and Nutrition (3)
 CHDV 017 – Teaching Children in a Diverse Society (3)
 CHDV 020 – Introduction to Curriculum Planning (3)
 ENGL 059 – Children’s Literature (3)
 HED 044 – Health Education (3)
 NUTR 011 – Human Nutrition (3)
 PSYC 001 or 001H – Introductory Psychology (3)
 STAT 018 – Statistics for Behavioral and Social Sciences (4)
 or STAT 050 – Elementary Statistics (4)

For the Mexican American Studies major at CSULA:
(Information derived from Assist.org)

ENGL 047 – Mexican and Chicano Literature (3)
 HIST 031 – History of Mexican Americans in the United States (3)
 SOC 031 – Chicano Sociology (3)
 SPAN 012 – Spanish Literature in Translation (3)

For the Gender, Ethnicity, and Multicultural Studies major at Cal Poly-Pomona:
(Information derived from Assist.org)

ANTH 031 – Mexican and Chicano Culture (3)
 ENGL 044B – World Literature: 1500-1800 A.D. (3)
 ENGL 044C – World Literature: 1800-Mid 20TH Century (3)
 ENGL 057 – Modern Drama (3)
 ENGL 061 – Introduction to the Novel (3)
 GEOG 002 – Cultural Geography (3)
 HIST 002B – History of World Civilizations from 1500 (3)
 HIST 007B – United States History from 1876 (3)
 HIST 012 – The North American Indian (3)
 HIST 029A – African American History to 1865 (3)
 HIST 029B – African American History from 1865 (3)
 HIST 031 – History of Mexican Americans in the United States (3)
 HIST 041 – History of Asian Pacific Americans (3)
 MUSC 023 – Music Cultures of the World (3)
 PHIL 001 – Introduction to Philosophy (3)
 or 001H – Honors Introduction to Philosophy (3)
 RELG 002 – Comparative Religions: Far East (3)
 SOC 014 – Introduction to Ethnic Studies (3)
 SOC 029 – Sociology of the African-American (3)
 THRT 001 – Introduction to Theatre (3)

REQUIRED SUBTOTAL.....	50 – 51
CSU General Education or CSU IGETC Pattern.....	37– 39
DEGREE TOTAL	60

ELECTRICAL AND ELECTRONIC TECHNOLOGY

(Engineering & Technology Division)

Applied Circuits & Systems – Occupational Skills Certificate

Top Code: 0934.00

The curriculum prepares the student for employment and career development in the Electrical industry. Students enrolling will have the opportunity to receive instruction and hands-on laboratory experience in theory and applications of direct current and alternating current circuits. Explanation of electrical terms, components, electrical codes and standards and applications and interaction of power distribution, energy management, cogeneration and alternate energy will be covered.

Additional studies include print and specifications, electrical code requirements and standards, conduits, lighting systems, control and protective devices, grounding systems, transformers, specialty systems and power generation and distribution systems. The use of precision test and measurement instruments such as analyzer and diagnostic scan tools keep students current with the latest industry standards. All related applicable specifications and technical calculations are covered.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an understanding of the basic principles of electricity, electrical laws, circuit concepts, application of DC and AC, and series/parallel/combination circuits.
2. Demonstrate knowledge and skills required to perform basic apprentice level electrical duties per electrical codes, and safety practices.
3. Differentiate and apply the proper selection of tools and materials for electrical service, installation and repairs.
4. Demonstrate an understanding of the principles of power production, generation, transmission and distribution of electrical energy.
5. Demonstrate an understanding of hardware/software and application of Programmable Logic Controller (PLC) Systems and their use in the manufacturing process.

Requirements for the Occupational Skills Certificate (16 units):

Recommended sequence:

ELTY 248A – Introduction to Electrical Technology (4)

ELTY 248B – Electrical Power Generation and Control Circuits (4)

ELTY 248C – Electrical Power Distribution Systems and Machinery (4)

ELTY 248D – Programmable Controllers/Solid State Devices/Electronic Application (4)

Recommended electives

ELTY 217 – Electrical Inspection and Codes (2)

BLDG 212 – Print Reading for Construction (3)

BLDG 213 – Building Construction Codes and Standards (3)

Electrical Technology – Associate in Science Degree, Certificate of Achievement

Top Code: 0952.20

The Electrical Technology program provides leading edge technical training, which will prepare students for career opportunities in the electrical industry.

The curriculum offers technical training to acquire knowledge and skills related to the design and installation of electrical equipment, materials, devices and lighting fixtures for the Building Construction Program. Hands-on laboratory experiments

will offer the necessary experience for safe use and operation of electrical hand and power tools. Technical training includes National Electrical Codes and standards. The program offers basic concepts and principles of electricity, machinery, and programming programmable logical controllers. Students will be instructed with state of the art technology test and measurement instruments.

Employment opportunities may include positions such as electrical assistant, electrical technician, maintenance technician, public utilities and sales representative, engineering technician along with purchasing and project administrator.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Describe principles of Direct and Alternating current, Ohm's law, current/voltage/power laws both verbally and in writing.
2. Demonstrate an installation of a residential branch circuit for a three-way switch.
3. Differentiate and apply the proper selection of materials, tools and test equipment for residential and commercial Electrical installation and repairs.
4. Demonstrate knowledge and skills required to perform basic apprentice-level electrician duties required by National Electrical code (NEC) for residential wiring.

Requirements for the Certificate of Achievement (18 units):

Recommended sequence:

ELTY 217 – Electrical Inspection and Codes (2)

ELTY 248A – Introduction to Electrical Technology (4)

ELTY 248B – Electrical Power Generation and Control Circuits (4)

ELTY 248C – Electrical Power Distribution Systems and Machinery (4)

ELTY 248D – Programmable Controllers/Solid State Devices/Electronic Application (4)

Recommended electives

ELTY 250 – Introduction to Photovoltaic Systems (4)

ELTY 251 – Photovoltaic Theory and Installation Techniques (4)

TECH 107A – Technical Calculations (3)

Requirements for the Associate in Science Degree – see page 101.

Electronics Technology Basic Digital Technician – Occupational Skills Certificate

Top Code: 0934.00

The curriculum contained in this certificate of completion provides a student with the necessary skills to seek entry-level employment as an electronics technician working on digital electronics systems. Students completing this certificate program will have the basic skills needed to work with electronic digital and microprocessor based equipment. In addition to the ability to use common electronics test equipment, such as oscilloscopes and digital multimeters, they will have an understanding of microcontroller hardware and software and the ability to prototype, test, and debug simple microcontroller based systems. Students will also have the skills required to design printed circuit boards, solder and perform basic assembly of electronic systems.

A Certificate of Completion is awarded upon completion of all required courses with a grade of C or better.

Requirements for the Occupational Skills Certificate (13 units):

Semester I

ELTN 115 – Printed Circuit & Electronic Hardware Design (3)

ELTN 130 – Introduction to Electronics (3)

Semester II

ELTN 117 – Introduction to Microcontrollers and Embedded Design (3)

Semester III

ELTN 132 – Digital and Control Electronics (4)

Photovoltaic Design & Installation – Associate in Science Degree, Certificate of Achievement

Top Code: 0946.00

This program provides a comprehensive introduction to solar photovoltaic (PV) energy systems, including system sizing, design and installation. Basic electrical theories and National Electrical Code related to photovoltaic will be studied. Hands-on experiments and laboratory assignments with state-of-the-art test instruments will provide testing and troubleshooting techniques. Successful participants will also be qualified to sit for the North American Board of Certified Energy Practitioners (NABCEP) “PV Installer Entry Level Certificate of Knowledge” examination.

Employment opportunities may include positions such as photovoltaic installer, inspector, electrical assistant, electrical technician, maintenance technician, public utilities and sales representative, engineering technician along with purchasing and project administrator.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Explain residential and commercial photovoltaic system terminology and installation techniques both verbally and in writing
2. Demonstrate an apprentice-level installation of a residential rooftop photovoltaic system
3. Demonstrate knowledge and skills required to install basic ground and pole mount photovoltaic systems
4. Differentiate and apply the proper selection of materials, tools and test equipment for residential photovoltaic system installation and repairs.
5. Demonstrate the use of the Sun pathfinder calculator for shading analysis

Requirements for the Certificate of Achievement (18 units):

Recommended sequence:

ELTY 217 – Electrical Inspection and Codes (2)

ELTY 248A – Introduction to Electrical Technology (4)

ELTY 248B – Electrical Power Generation and Control Circuits (4)

ELTY 250 – Introduction to Photovoltaic Systems (4)

ELTY 251 – Photovoltaic Theory and Installation Techniques (4)

Recommended electives

BLDG 212 – Print Reading for Construction (3)

DT 008A – Engineering Graphics (3)

TECH 107A – Technical Calculations (3)

Requirements for the Associate in Science Degree – see page 101.

EMERGENCY MEDICAL TECHNOLOGY

(Health Sciences Division)

Basic Level Emergency Medical Technician – *Occupational Skills Certificate*

Top Code: 1250.00

The Basic Level Emergency Medical Technician curriculum provides the student with the necessary knowledge and skills to seek employment with ambulance service companies, first responder agencies, fire departments, and hospitals as an Emergency Medical Technician (EMT). Emphasis is on the fundamental principles and skills required to provide emergency medical care for the ill or injured at the scene of an accident or the onset of sudden illness and during transport to a medical care facility.

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Upon successful completion of the curriculum, the student is eligible to take NREMT examination for Emergency Medical Technician. The Basic Level Emergency Medical Technician program meets the requirements of California Code of Regulations, Title 22, for EMT Training. The State of California and local EMS Agencies have additional requirements including State and Federal criminal background investigations for certification as an EMT in California.

Program Outcomes:

1. Develop the necessary skills and knowledge in human anatomy and physiology for basic level prehospital care.
2. Differentiate diagnostic signs and interpretations of sudden illness and injuries for basic level prehospital care.
3. Demonstrate the necessary skills and procedures of basic emergency rescue and care.

Required course for the Occupational Skills Certificate (6.5 units):

EMED 101A - Emergency Medical Technology (6.5)

ENGINEERING

(Engineering & Technology Division)

Engineering: Civil Engineering Emphasis – *Associate in Science Degree*

Top Code: 901.00

The Associate in Science in Engineering: Civil Engineering Emphasis provides a strong preparation for students planning to transfer to a 4-year university and major in Civil Engineering. The curriculum includes fundamental engineering and science core courses as well as required lower-division courses in Civil Engineering.

PLEASE NOTE: *The courses that universities and colleges require for transfer vary. When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Develop technical solutions to civil engineering problems using principles of mathematics, science, and engineering.
2. Analyze and interpret empirical data to provide a basis for solutions to civil engineering problems.
3. Communicate orally and in writing the results of experiments, projects, and data analysis.

Requirements for the Associate in Science Degree (52 units):

ENGR 010 – Introduction to Engineering (2)
MATH 005A – Single Variable Calculus I (5)
MATH 005B – Single Variable Calculus II (5)
MATH 005C – Multivariable Calculus (5)
MATH 055 – Differential Equations (5)
PHYS 001A – Physics for Scientists and Engineers I: Mechanics (5)
PHYS 001C – Physics for Scientists and Engineers III: Electricity, Magnetism, and Optics (5)
CHEM 001A – General Chemistry and Chemical Analysis (5)
ENGR 016 – Engineering Circuits (3)
ENGR 002 – Engineering Graphics (3)
ENGR 011 – Statics (3)
ENGR 014 – Materials of Construction (3)
ENGR 018 – Introduction to Numerical Analysis (3)

Requirements for the Associate in Science Degree – see page 101.

Engineering: Electrical Engineering Emphasis - Associate in Science Degree

Top Code: 0901.00

The Associate in Science in Engineering: Electrical Engineering Emphasis provides a strong preparation for students planning to transfer to a 4-year university and major in Electrical Engineering. The curriculum includes fundamental engineering and science core courses as well as required lower-division courses in Electrical Engineering.

PLEASE NOTE: *The courses that universities and colleges require for transfer vary. When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Develop technical solutions to electrical engineering problems using principles of mathematics, science, and engineering.
2. Analyze and interpret empirical data to provide a basis for solutions to electrical engineering problems.
3. Communicate orally and in writing the results of experiments, projects, and data analysis.

Requirements for the Associate in Science Degree (43 units):

ENGR 010 – Introduction to Engineering (2)
MATH 005A – Single Variable Calculus I (5)
MATH 005B – Single Variable Calculus II (5)
MATH 005C – Multivariable Calculus (5)
MATH 055 – Differential Equations (5)
PHYS 001A – Physics for Scientists and Engineers I: Mechanics (5)
PHYS 001C – Physics For Scientists and Engineers III: Electricity, Magnetism, and Optics (5)
CHEM 001A – General Chemistry and Chemical Analysis (5)
ENGR 016 – Engineering Circuits (3)
ENGR 018 – Introduction to Numerical Analysis (3)

Requirements for the Associate in Science Degree – see page 101.

Engineering: Mechanical, Aerospace, and Manufacturing Engineering Emphasis -

Associate in Science Degree

Top Code: 901.00

The Associate in Science in Engineering: Mechanical, Aerospace, and Manufacturing Engineering Emphasis provides a strong preparation for students planning to transfer to a 4-year university and major in Mechanical, Aerospace, and Manufacturing Engineering. The curriculum includes fundamental engineering and science core courses as well as required lower-division courses in Mechanical, Aerospace, and Manufacturing Engineering.

PLEASE NOTE: *The courses that universities and colleges require for transfer vary. When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Develop technical solutions to mechanical, aerospace, and manufacturing engineering problems using principles of mathematics, science, and engineering.
2. Analyze and interpret empirical data to provide a basis for solutions to mechanical, aerospace, and manufacturing engineering problems.
3. Communicate orally and in writing the results of experiments, projects, and data analysis.

Requirements for the Associate in Science Degree (52 units):

ENGR 010 – Introduction to Engineering (2)
MATH 005A – Single Variable Calculus I (5)
MATH 005B – Single Variable Calculus II (5)
MATH 005C – Multivariable Calculus (5)
MATH 055 – Differential Equations (5)
PHYS 001A – Physics for Scientists and Engineers I: Mechanics (5)
PHYS 001C – Physics For Scientists and Engineers III: Electricity, Magnetism, and Optics (5)
CHEM 001A – General Chemistry and Chemical Analysis (5)
ENGR 016 – Engineering Circuits (3)
ENGR 002 – Engineering Graphics (3)
ENGR 011 – Statics (3)
ENGR 014 – Materials of Construction (3)
ENGR 018 – Introduction to Numerical Analysis (3)

Requirements for the Associate in Science Degree – see page 101.

Engineering & Technology – Associate in Arts Degree

Top Code: 924.00

The Engineering and Technology area of emphasis allows students the opportunity to pursue multidisciplinary programs of study at the university level. This area of emphasis provides a flexible environment for high-achieving students to study complex engineering disciplines such as architectural engineering, biochemical engineering, computer sciences, electromechanical engineering, mathematics, mechanical engineering, engineering mathematics, engineering physics, and other similar disciplines at CSU, UC, and private universities.

PLEASE NOTE: *The courses that universities and colleges require for transfer vary. When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Cognition / Curriculum: Analyze and evaluate disciplinary concepts and principles to solve complex problems
2. Information Competency / Resource Planning: Synthesize research findings, disciplinary techniques and technology in the resolution of a capstone assessment
3. Student Goals: Successfully realize cumulative achievement to achieve Degree attainment or transfer.

Requirements for the area of emphasis (18 units minimum)

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete 18 units with at least 3 units in three of the disciplines listed below.

Architecture:

ARCH 010A – Architectural Design Fundamentals (3)
ARCH 010B – Design Fundamentals (3)
ARCH 011 – Introduction to Architecture (2)
ARCH 012A – Visual Communications I (3)
ARCH 012B – Visual Communications II (3)
ARCH 014 – Materials and Processes of Construction (2)
ARCH 020A – Architectural Design (6)
ARCH 020B – Architectural Design (6)
ARCH 022A – Architectural Practice (5)
ARCH 022B – Architectural Practice (5)
ARCH 024A – History of Architecture (3)
ARCH 024B – History of Architecture (3)

Computer Information Systems:

CIS 001 – Introduction to Computers (3)
CIS 002 – Introduction to Info Systems and Programming (5)
CIS 010 – Introduction to Information Systems (3)
CIS 011 – Information and Communication Technology Essentials (4)
CIS 014 – C++ Programming (3)
CIS 016 – Java Programming (3)
CIS 022 – Introduction to the Internet (3)
CIS 030 – Networks and Telecommunications (3)
CIS 031 – Database Systems (3)
CIS 036 – Introduction to Visual Basic (3)
CIS 038 – Advanced Visual Basic (3)
CIS 040 – UNIX Administration (3)
CIS 050 – Survey of E-Commerce/E-Business Technology (3)
CIS 055 – Introduction to E-Business Practices (3)
CIS 060 – E-Commerce Fundamentals (3)
CIS 062 – Introduction to Systems Analysis (3)
CIS 066 – Assembly Language Programming (3)
CIS 074 – Introduction to Object Oriented Systems Analysis and Design (3)
CIS 080 – Microcomputer Applications (3)

Computer Science:

CS 001 – Introduction to Computers and Programming (5)
CS 003A – Fundamentals of Computer Science II (C++) (4)
CS 003B – Fundamentals of Computer Science II (Java) (4)
CS 004 – Programming Languages (3)
CS 006 – Introduction to Applied Logic Design (4)
CS 008 – Fundamentals of Computer Science III – Data Structures (4)
CS 010 – Pascal (4)

CS 012 – C Programming (3)
CS 018 – UNIX Scripting With Bash (4)
CS 038 – Introduction to Software Engineering (5)
CS 039 – Introduction to Computer Architecture (4)
CS 043 – Fortran (4)
CS 045 – Discrete Structures with Computer Science Applications (5)
CS 050 – Introduction to Numerical Methods (5)
CS 066 – Assembly Language Programming for the Sciences and Mathematics (4)
CS 080 – Seminar in Computer Science and Computer Engineering (2)

Electricity and Electronics:

ELTY 012 – Basic Electricity–Electronics (Industrial Arts) (2)
ELTN 009 – Principles of DC and AC Network Analysis (5)
ELTN 015 – Computer Aided Electronic Drafting (3)
ELTN 025 – Logic & Microcomputer Electronics (4)
ELTN 031 – Circuit Analysis (5)
ELTN 032 – Digital and Control Electronics (4)

Engineering:

ENGR 001A – Surveying (3)
ENGR 001B – Surveying (3)
ENGR 002 – Engineering Graphics (3)
ENGR 006 – Engineering Drawing (2)
ENGR 010 – Introduction to Engineering (2)
ENGR 014 – Materials of Construction (3)
ENGR 015A – Applied Mechanics–Statics (3)
ENGR 015B – Applied Mechanics (3)
ENGR 016 – Engineering Circuits (3)
ENGR 017 – Dynamics (3)

Design Technology:

DT 008A – Introduction to Digital Design and Fabrication (3)
DT 008B – Intermediate Digital Design and Fabrication (3)
DT 008C – Advanced Systems Design and Fabrication (4)
DT 017 – Building Construction Technical Graphics (3)

Mathematics:

MATH 003 – College Algebra (4)
MATH 005A – Single Variable Calculus I (5)
MATH 005B – Single Variable Calculus II (5)
MATH 005C – Multivariable Calculus (5)
MATH 007A – Mathematical Analysis 1 (4)
MATH 007B – Mathematical Analysis 2 (4)
MATH 008 – Trigonometry (4)
MATH 009 – Precalculus Mathematics (5)
MATH 010 – Linear Algebra and Applications (5)
MATH 022 – Discrete Mathematics (4)
MATH 055 – Differential Equations (5)

Physics:

PHYS 001A – General Physics (5)
PHYS 001B – General Physics (5)
PHYS 001C – General Physics (5)

PHYS 001D – General Physics (5)
PHYS 002A – General Physics (4)
PHYS 002B – General Physics (4)
PHYS 031A – General Physics (5)
PHYS 031B – General Physics (5)

Requirements for the Associate in Arts Degree – see page 97.

Manufacturing Engineering Technician – *Certificate of Achievement*

Top Code: 924.00

The Manufacturing Engineering Technician program is designed to prepare students for entry-level careers such as machinists, tool and die makers, computer numerical control (CNC) operators, CNC programmers, and aerospace and mechanical technicians in several manufacturing and engineering areas. The program exposes students to a broad range of technical skills that provide a practical education and prepares students for the modern manufacturing world.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate skills in blueprint reading, machining processes, and related concepts including geometric dimension and tolerancing systems.
2. Utilize G-code programs to automated software programs (Mastercam) for CNC programming of 2- and 3-axis machines.
3. Apply the basics of manufacturing, metal machining, and fabrication processes to mechanical designs.

Requirements for the Certificate of Achievement (12 units):

DT 008A – Introduction to Digital Design and Fabrication (3)
MACH 101 – Beginning Metalworking Skills (3)
DT 230 – Computer-Aided Manufacturing (3)
DT 150 – Reading Engineering Drawings (1)
DT 240 – Geometric Dimensioning and Tolerancing (2)

This Certificate of Achievement is not eligible as a major for an Associate Degree.

Mechanical Engineering Technician – *Certificate of Achievement*

Top Code: 924.00

The Mechanical Engineering Technician program provides a hands-on educational experience to prepare students for successful entry-level careers in mechanical and manufacturing engineering technology, including mechanical engineering technicians, engineering technicians (except drafters), electro-mechanical technicians, and industrial engineering technicians. Mechanical engineering technicians utilize mechanical design and the process of developing a product that can improve society. The certificate will produce technicians who are able to analyze, design, implement and maintain mechanical systems, communicate effectively, and work well on team-based projects. The program exposes students to the skills and knowledge that will make them competitive in the job market.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Manipulate the mechanical system to create a finished product through design process.
2. Analyze the mechanical systems to address improvements in the design and prototyping processes.
3. Develop a technical project that includes testing and documentation.

Requirements for the Certificate of Achievement (13 - 14 units):

DT 008A – Introduction to Digital Design and Fabrication (3)

or ENGR 002 – Engineering Graphics (3)

or MIT 101 – Introduction to Robotics (4)

DT 008B – Intermediate Digital Design and Fabrication (3)

DT 008C – Advanced Systems Design and Fabrication (4)

DT 150 – Reading Engineering Drawings (1)

ENGR 010 – Introduction to Engineering (2)

This Certificate of Achievement is not eligible as a major for an Associate Degree.

ENGLISH**(English Division)****English – Associate in Arts Degree for Transfer to CSU**

Top Code: 1501.00

The Associate in Arts in English for Transfer Degree introduces students to a wide range of literary expression while grounding them in the core skills of writing, literary analysis, and critical thinking necessary for success as English majors at a transfer university.

English majors enroll in core classes in the methods of literary study and then take survey courses which expose them to a range of types and styles of literature. Students complete the program by choosing among English courses on genres, ethnic literature, special topics in literature, film, and creative writing. Aside from being well prepared to continue their studies, students who complete the Associate in Arts in English for Transfer Degree at PCC will be informed and skilled in ways which will help them negotiate their place in a changing world.

The Associate in Arts in English for Transfer Degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Program Outcomes:

1. Demonstrate sensitivity to and an analytical grasp of the nuances of literary language.
2. Demonstrate critical thinking skills, specifically in relation to poetry, drama, fiction, or other types of literature.
3. Demonstrate an understanding of the ways that literature helps to illuminate the human condition.
4. Demonstrate reading skills relevant to literary study.
5. Demonstrate writing skills relevant to literary study.

Associate in Arts in English for Transfer Degree

REQUIRED CORE: 8 units

- ENGL 001B – Reading and Composition (4)
- ENGL 001C – Intermediate Composition–Critical Thinking and Argument (4)

LIST A: Select any two courses (6 units)

- ENGL 030A – American Literature (3)
- ENGL 030B – American Literature (3)
- ENGL 030C – American Literature (3)
- ENGL 044A – World Literature: Antiquity to 1500 (3)
- ENGL 044B – World Literature: 1500 to 1800 A.D. (3)
- ENGL 044C – World Literature: 1800 to Mid-20th Century (3)
- ENGL 046A – English Literature (3)
- ENGL 046B – English Literature (3)
- ENGL 053 – Interpreting Poetry (3)
- ENGL 060 – Masterpieces of Drama (3)
- ENGL 061 – Introduction to the Novel (3)

LIST B: Select one or two course(s) from below or any course from List A not used (3–6 units)

- ENGL 005A – Creative Writing (3)
- ENGL 006 – Short Story Writing (3)
- ENGL 008 – Writing Poetry (3)
- ENGL 009 – Creative Nonfiction (3)
- ENGL 047 – Mexican and Chicano Literature (3)
- ENGL 050 – Afro-American Literature (3)
- ENGL 052 – Asian-American Literature (3)
- ENGL 078A – Introduction to Shakespeare (3)
- ENGL 078B – Introduction to Shakespeare (3)

LIST C: Select one course from below or any course from List A and B not used (3 units)

- ENGL 005B – Creative Writing (3)
- ENGL 007 – Inscape Magazine Publication (3)
- ENGL 024 – A Literature in Translation (3)
- ENGL 025A – Interpreting Modern Literature (3)
- ENGL 025C – Women in Literature (3)
- ENGL 025D – Science Fiction and Fantasy (3)
- ENGL 025E – Literature of Horror (Gothic Novel) (3)
- ENGL 025F – Comedy and Literature (3)
- ENGL 025G – Mystery and Crime Fiction (3)
- ENGL 025H – American Journeys (3)
- ENGL 025I – Post-Colonial Literatures (3)
- ENGL 025J – Utopian and Dystopian Literature (3)
- ENGL 026 – Introduction to Literature Theory and Criticism (3)
- ENGL 034 – Major Novelist (3)
- ENGL 035 – Major Dramatist (3)
- ENGL 036 – Major Poet (3)
- ENGL 037 – Major Critic (3)
- ENGL 045A – Literature of The Bible (3)
- ENGL 045B – Literature of The Bible (3)
- ENGL 048 – Asian Literature (3)
- ENGL 049A – Film as Dramatic Literature (3)
- ENGL 049B – Film as Dramatic Literature (3)

ENGL 051 – Native American Mythology and Literature (3)
 ENGL 054 – California Literature (3)
 ENGL 057 – Modern Drama (3)
 ENGL 059 – Children’s Literature (3)
 ENGL 082A – Introduction to Mythology (3)
 ENGL 082B – Introduction to Mythology (3)
 ENGL 082C – Introduction to Mythology (3)

REQUIRED SUBTOTAL.....	20
CSU General Education or IGETC CSU Pattern	37–39
Transferable Electives (as needed to reach 60 transferable units)	
DEGREE TOTAL	60

English Literature – Associate in Arts Degree

Top Code: 1501.00

This area of emphasis is intended to align student course work with preparation for transfer to universities in such majors as English, Literature, Comparative Literature, World Literature, and other similar disciplines in CSU, UC, and private schools. Courses in this major encompass traditional literary history and interpretation as well as cross-cultural inquiry and current theoretical debates. Literature majors are trained in critical reading, writing, and thinking, as well as in literary interpretation. Literature is the study of representation, ideas, language, and culture. As such, it is a source of knowledge and pleasure, as well as a field of study. Literary texts are social documents in artistic form which speak to us as much about historical issues as about aesthetic matters. Literature students learn to think critically and to understand the role that texts play in a given society, past or present.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate sensitivity to and an analytical grasp of the nuances of literary language
2. Demonstrate critical thinking skills, specifically in relation to poetry, drama, fiction, or other types of literature
3. Demonstrate an understanding of the ways that literature helps to illuminate the human condition
4. Demonstrate reading skills relevant to literary study
5. Demonstrate writing skills relevant to literary study.

Requirements for the area of emphasis (18 units minimum)

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete English 001C or English 026 and 15 units consisting of courses from at least three of the five categories listed below and including a minimum of two Literary Survey courses.

Literary Survey (2 courses):

ENGL 030A – American Literature (3)
 ENGL 030B – American Literature (3)
 ENGL 030C – American Literature (3)
 ENGL 044B – World Literature: 1500–1800 A.D. (3)
 ENGL 044C – World Literature: 1800–Mid 20th Century (3)
 ENGL 046A – English Literature (3)
 ENGL 046B – English Literature (3)

Literary Origins:

- ENGL 044A – World Literature: Antiquity to 1500 (3)
- ENGL 045A – Literature of the Bible (3)
- ENGL 045B – Literature of the Bible (3)
- ENGL 078A – Introduction to Shakespeare (3)
- ENGL 078B – Introduction to Shakespeare (3)
- ENGL 082A – Introduction to Mythology (3)
- ENGL 082B – Introduction to Mythology (3)
- ENGL 082C – Introduction to Mythology (3)

Gender and Ethnic Literature:

- ENGL 024 – A Literature in Translation (3)
- ENGL 025C – Women in Literature (3)
- ENGL 047 – Mexican and Chicano Literature (3)
- ENGL 048 – Asian Literature (3)
- ENGL 050 – African-American Literature (3)
- ENGL 051 – Native American Mythology and Literature (3)
- ENGL 052 – Asian American Literature (3)

Genre and Modes in Literature:

- ENGL 025A – Interpreting Modern Literature (3)
- ENGL 025D – Science Fiction and Fantasy (3)
- ENGL 025E – Literature of Horror (Gothic Novel) (3)
- ENGL 025F – Comedy and Literature (3)
- ENGL 025G – Mystery and Crime Fiction (3)
- ENGL 034 – Major Novelist (1)
- ENGL 035 – Major Dramatist (1)
- ENGL 036 – Major Poet (1)
- ENGL 037 – Major Critic (1)
- ENGL 049A – Film as Dramatic Literature (3)
- ENGL 049B – Film as Dramatic Literature (3)
- ENGL 053 – Interpreting Poetry (3)
- ENGL 057 – Modern Drama (3)
- ENGL 060 – Masterpieces of Drama (3)
- ENGL 061 – Introduction to the Novel (3)

Special Topics in Literature:

- ENGL 025H – American Journeys (3)
- ENGL 025I – Post-Colonial Literatures (3)
- ENGL 025J – Utopian and Dystopian Literature (3)
- ENGL 026 – Introduction to Literary Theory and Criticism (3)
- ENGL 054 – California Literature (3)
- ENGL 059 – Children's Literature (3)

Requirements for the Associate in Arts Degree – see page 97.

FASHION

(Visual Arts and Media Studies Division)

Fashion Assistant – Certificate of Achievement

Top Code: 1303.00

The curriculum prepares students for the workplace environment with skills required to work as an assistant to a fashion designer, merchandiser, stylist, production manager, or design room manager. The coursework covers essential skills in apparel construction, flat pattern and draping. Introduction to apparel industry concepts and design principles will also be taught. Fashion sketch, spec sheets, production flats, and costing are part of the training program. Upon completion of the required courses, the student will have a working vocabulary and basic knowledge of the apparel industry.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Design entry level fashion garments using external and historical fashion influences and appropriate fabric selection.
2. Create a design portfolio and industry marketing materials and production documents.
3. Utilize current draping and drafting methods to create original patterns.
4. Demonstrate an intermediate proficiency in operating industrial equipment for apparel industry garment construction and fabric selection.

Requirements for the Certificate of Achievement (24 units):

Recommended sequence:

Semester I

FASH 001A – Fashion Survey (3)

FASH 002 – Introduction to Fashion Industry (3)

FASH 021 – Principles of Fashion (3)

FASH 110 – Fashion Illustration (3)

Semester II

FASH 005 – Pattern Drafting (3)

FASH 009 – Beginning Textiles (3)

FASH 111A – Introduction to Fashion Design (3)

FASH 124 – History of Costume (3)

This Certificate of Achievement is not eligible as a major for an Associate Degree.

Fashion – Design – Associate in Science Degree, Certificate of Achievement

Top Code: 1303.00

The curriculum prepares students for the apparel industry. Instruction is offered in all phases of industrial clothing construction, patternmaking, fashion design, and technical sketch. Computer studies are also part of the required curriculum. Studies include fashion trends, design principles, ethnic costume, color theory and the understanding of the apparel industry. Marker making, cost sheets, and production sketches are part of the technical skills learned.

The Fashion Design option will prepare the graduate to work in a design room as assistant designer, junior designer, merchandiser, stylist, illustrator or graphic artist. A design room internship is part of this training program in design. Studies include advanced design and illustration, computer assisted illustration, historical and ethnic costume studies, along with current color and textile trends in the apparel industry. A portfolio of designs and a fashion collection is part of the final requirements.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Design groups of advanced level fashion garments using external and historical fashion influences and appropriate fabric selection.
2. Create a professional portfolio and industry marketing materials and production documents.
3. Utilize current draping and drafting methods to create original well-fitting patterns.
4. Demonstrate an advanced level proficiency in operating industrial equipment for apparel industry garment construction and fabric selection.

Requirements for the Certificate of Achievement (43–45 units):

Recommended sequence:

Semester I

FASH 001A – Fashion Survey (3)
FASH 002 – Introduction to Fashion Industry (3)
FASH 021 – Principles of Fashion (3)
FASH 110 – Fashion Illustration (3)

Semester II

FASH 005 – Pattern Drafting (3)
FASH 009 – Beginning Textiles (3)
FASH 111A – Introduction to Fashion Design (3)
FASH 124 – History of Costume (3)

Semester III

FASH 108 – Patternmaking by Draping (3)
FASH 111B – Intermediate Fashion Design (3)

Select 2 courses from this list:

FASH 001B – Intermediate Clothing Construction (3)
FASH 001C – Advanced Clothing Construction (3)
FASH 109 – Computer Aided Fashion Design (3)
FASH 115 – Intermediate Computer-Assisted Fashion Graphics (2)

Semester IV Select 3 courses from this list:

FASH 001B – Intermediate Clothing Construction (3)
FASH 001C – Advanced Clothing Construction (3)
FASH 105 – Intermediate Fashion Drafting and Draping (3)
FASH 106 – Advanced Pattern Drafting and Draping (3)
FASH 109 – Computer Aided Fashion Design (3)
FASH 111C – Advanced Fashion Design (3)
FASH 115 – Intermediate Computer-Assisted Fashion Graphics (2)
FASH 130 – Fashion Workshop (3)

Requirements for the Associate in Science Degree – see page 101.

Fashion Marketing – Occupational Skills Certificate

Top Code: 1303.00

The curriculum prepares an individual for the workplace environment with skills that apply to the business of apparel sales, assistant in a manufacturing or marketing business or other position where knowledge of the apparel industry and general business principles are an advantage.

With this background, the student may choose to work in retail or wholesale buying or sales, prepare visual presentations, and contribute to styling, display, and marketing ventures.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an understanding of entry level fashion merchandising concepts that integrate fashion with business technologies.
2. Demonstrate a command of the basic vocabulary of the fashion industry.
3. Create entry level original projects that analyze, define, and solve problems in fashion marketing.
4. Demonstrate an understanding of entry level business concepts and their relationship to the fashion industry.
5. Demonstrate a command of basic business vocabulary.

Requirements for the Occupational Skills Certificate (18 units):

FASH 002 – Introduction to Fashion Industry (3)

FASH 009 – Beginning Textiles (3)

or FASH 124 – History of Costume (3)

FASH 021 – Principles of Fashion (3)

BIT 102 – Spreadsheet Basics (1)

BIT 109 – Business Software–Microsoft PowerPoint (2)

BUS 009 – Introduction to Business (3)

BUS 010 – Introduction to Management (3)

or MRKT 020 – Principles of Marketing (3)

or MRKT 125 – Merchandising (3)

Recommended electives

FASH 001A – Fashion Survey (3)

Historical Costume Making – Occupational Skills Certificate

Top Code: 1303.00

Upon completion of the requirements, the costume student will be prepared to pattern, cut and sew historical costumes. The use of industrial sewing equipment, patternmaking, tools and materials are part of the training program. Historical costumes will be studied and created by the student as part of the program to train students to enter the field of costume technician or sewer.

This training serves to offer the basic skills required to qualify for employment in a costume business, or as a costume assistant. Studies in the history of fashion, both modern and historical clothing construction, alterations, and patternmaking by draped methods are part of the course of study.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Design and create an historical costume based on historical research using appropriate fabric selection.
2. Utilize current draping and drafting methods to create original patterns that become garments that fit the human body well.
3. Demonstrate an intermediate proficiency in operating industrial equipment for apparel industry garment construction and fabric selection.

Requirements for the Occupational Skills Certificate (15 units):

FASH 001A – Fashion Survey (3)
FASH 002 – Introduction to Fashion Industry (3)
FASH 005 – Pattern Drafting (3)
FASH 124 – History of Costume (3)
FASH 126 – Historical Costume Making (3)

Recommended electives

FASH 001B – Intermediate Clothing Construction (3)
FASH 001C – Advanced Clothing Construction (3)
FASH 108 – Patternmaking by Draping (3)
FASH 110 – Fashion Illustration (3)
THRT 015 – Costume Crafts (3)

FIRE TECHNOLOGY

(Business Division)

Fire Academy Preparation – Occupational Skills Certificate

Top Code: 2133.00

This certificate program is designed to prepare future firefighters for the academic rigors of a fire academy. Though this certificate does not guarantee admission into a fire academy, the program is designed to: (1) meet the course requirements specified by local fire academies, (2) significantly enhance the student's ability to compete for academy positions, and (3) increase the student's probability of success while in the fire academy. Using the knowledge and courses from this program, the students can continue their training to the next level which is the Certificate of Achievement in Fire Technology.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Discuss the role of the fire service in the community and the importance of its Mission Statement.
2. Identify variables that impact the growth/spread/hazards of structure fires.
3. Describe the ten standard firefighting orders and their application during a wildland fire.
4. Define typical fire detection and alarm systems.
5. Recognize the elements of building construction and conditions under which they are likely to fail.

Requirements for the Occupational Skills Certificate (15 units):

Recommended sequence:

FIRE 110 – Introduction to Fire Technology (3)
FIRE 112 – Fundamentals of Fire Behavior and Control (3)
FIRE 115 – Fundamentals of Personal Safety and Emergency Action (3)
FIRE 128 – Fundamentals of Fire Protection Equipment and Detection (3)
FIRE 142 – Building Construction for Fire Protection (3)

Recommended electives

EMED 101A – Emergency Medical Technology (5)

KINA 037 – Police-Fire Agility Training (1)

Fire Technology – Associate in Science Degree, Certificate of Achievement

The curriculum prepares students to seek employment in fire protection and related fields in federal, state, local and private fire protection agencies. Instruction is offered in all phases of the fire service and provides the student with a thorough understanding of fire science and the fireground.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Discuss the role of the fire service in the community and the importance of its Mission Statement.
2. Identify variables that impact the growth/spread/hazards of structure fires.
3. Describe different safeguards for fire prevention risks in flammable liquids, solid storage and storage of gasses.
4. Demonstrate the ability to recognize a hazardous materials incident based on auditory and visual clues.
5. Define typical fire detection and alarm systems.

Requirements for the Certificate of Achievement (41 units):

Recommended sequence:

Semester I

FIRE 110 – Introduction to Fire Technology (3)

FIRE 112 – Fundamentals of Fire Behavior and Control (3)

TECH 107A – Technical Calculations (3)

ENGL 001A – Reading and Composition (4)

or ENGL 100AH – Honors Reading and Composition (4)

Semester II

FIRE 114 – Fundamentals of Fire Prevention (3)

FIRE 116 – Fire Fighting Tactics and Strategy (3)

FIRE 120A – Hazardous Materials (3)

SPCH 001 – Fundamentals of Speech (3)

or SPCH 001H – Honors Fundamentals of Speech (3)

or SPCH 010 – Interpersonal Communication (3)

Semester III

FIRE 120B – Hazardous Materials (3)

FIRE 128 – Fundamentals of Fire Protection Equipment and Detection (3)

KINA 037 – Police-Fire Agility Training (1)

Semester IV

FIRE 115 – Fundamentals of Personal Safety and Emergency Action (3)

FIRE 142 – Building Construction for Fire Protection (3)

FIRE 146 – Fire Investigation (3)

Recommended Electives

BLDG 213 – Building Construction Codes and Standards (3)

ELTY 217 – Electrical Inspection and Codes (2)

Requirements for the Associate in Science Degree – see page 101.

GENDER, ETHNICITY, AND MULTICULTURAL STUDIES

(Social Sciences Division)

Gender, Ethnicity, and Multicultural Studies – Associate in Arts Degree

Top Code: 4901.00

In this area of emphasis history, culture, and contemporary issues are explored and analyzed through the intersecting perspectives of ethnicity, race, class, and gender. The curriculum combines an interdisciplinary knowledge of our socio-cultural world. Courses are open to all students in the College. Enrollment is encouraged for those who are seriously concerned about diversity and the quality of life in the 21st century. This area of emphasis prepares students for Gender, Ethnicity, and Multicultural Studies; Ethnic Studies; Women's Studies; and similar disciplines at CSU, UC, and private schools. Fields in which such concerns can find application are teaching, urban planning, social services, politics, recreation, law, the ministry, and many others. Such fields of study typically require advanced degrees.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Explore and analyze different areas of history, culture, and contemporary issues through perspectives of ethnicity, class, race and gender.
2. Develop critical thinking skills in global and sociocultural issues as outlined in one or more of the core courses for G.E.M.S.

Requirements for the area of emphasis (18 units minimum)

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete at least one course from at least three of the categories listed below:

Multicultural Studies

ANTH 002 – Cultural Anthropology (3)
ENGL 012 – Intercultural Communication (3)
ENGL 025I – Post-Colonial Literatures (3)
GEOG 002 – Cultural Geography (3)
GEOG 003 – World Regional Geography (3)
HIST 008 – History of California (3)
LING 012 – Intercultural Communication (3)
MUSC 023 – Music Cultures of the World (3)
SOC 014 – Introduction to Ethnic Studies (3)

Gender Studies

ENGL 025C – Women in Literature (3)
HIST 025B – Women in American Society (3)

African American Studies

ART 002 – History of African and African-American Art (3)
DANC 004A – World Ethnic Dance: Africa (1)
ENGL 050 – African-American Literature (3)
HIST 027A – Traditional Africa (3)
HIST 027B – Modern Africa (3)
HIST 029A – African American History to 1865 (3)
HIST 029B – African American History from 1865 (3)
MUSC 025 – African American Music (3)
PSYC 029 – Psychology of the Afro-American (3)
SOC 029 – Sociology of the African-American (3)

American Indian/Native American Studies

ANTH 012 – American Indian Cultures (3)
ENGL 051 – Native American Mythology and Literature (3)
HIST 012 – The North American Indian (3)

Asian American/Pacific Islander Studies

ART 003A – History of Asian Art (3)
ART 003B – History of Asian Art (3)
CHIN 010 – Chinese Civilization (3)
CHIN 012 – Chinese Literature in Translation (3)
DANC 004C – World Ethnic Dance: Asia (Central/Southeast) (1)
DANC 004E – World Ethnic Dance: India (1)
ENGL 048 – Asian Literature (3)
ENGL 052 – Asian American Literature (3)
HIST 018 – History of South Asia, Southeast Asia and the Pacific (3)
HIST 019 – History of China, Japan and Korea (3)
HIST 041 – History of Asian Pacific Americans (3)
JAPN 010 – Japanese Civilization (3)
JAPN 011 – Inside Japan (1)
JAPN 012 – Japanese Literature in Translation (3)
MUSC 027 – Asian Music (3)
PSYC 041 – Psychology of the Asian American (3)
SOC 041 – Sociology of the Asian American (3)

Mexican American/Chicano/Latino Studies

ANTH 031 – Mexican and Chicano Culture (3)
ART 007 – Pre-Columbian Art (3)
ART 008 – History of Mexican and Chicano Art (3)
DANC 004B – World Ethnic Dance: The Americas (1)
DANC 004H – World Ethnic Dance: Spain/Portugal (1)
ENGL 047 – Mexican and Chicano Literature (3)
HIST 009A – Latin America: Pre-Colombian to 1825 (3)
HIST 009B – Latin America: 1825 to the Present (3)
HIST 030 – History of Mexico (3)
HIST 031 – History of Mexican Americans in the United States (3)
MUSC 026 – Latin American Music (3)
PHIL 031 – Contemporary Chicano Philosophy (3)
PSYC 031 – Studies In Chicano Behavior (3)
SOC 031 – Chicano Sociology (3)
SPAN 031 – Language of the Barrio (3)
SPAN 042A – Civilization of Spain and Portugal (3)
SPAN 042B – Civilization of Spain and Portugal (3)
SPAN 044A – Civilization of Latin America (3)
SPAN 044B – Civilization of Latin America (3)

Requirements for the Associate in Arts Degree – see page 97.

GEOGRAPHY

(Natural Sciences Division)

Geography – Associate in Arts Degree for Transfer to CSU

Top Code: 2206.00

The Associate in Arts in Geography for Transfer degree provides students with a foundation in Geography for continued training at the upper division level for Geography majors. It also provides students a foundation for majors in environmental science, geology, geographic information systems, and natural sciences. Geography majors are increasingly needed to understand environmental changes and human impacts on the environment. Earning a degree in geography is a starting point for careers as surveyors, cartographers and photogrammetrists, surveying and mapping technicians, urban and regional planners, and geoscientists.

The Associate in Arts in Geography for Transfer degree requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.
3. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. All courses in the major must be completed with a grade of "C" or better.
6. A "P" (Pass) grade is not acceptable grade for courses in the major. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Program Outcomes:

1. Develop the ability to analyze and interpret geographic data.
2. Increase global awareness and multicultural literacy.
3. Develop an understanding of the usefulness of geography to real world problems.

Associate in Arts Degree in Geography for Transfer

REQUIRED CORE

GEOG 001 – Physical Geography (3)
GEOG 001L – Physical Geography Lab (1)
GEOG 002 – Physical Geography Lab (3)

LIST A: Select two to three (6–9 units)

GEOG 003 – World Regional Geography (3)
GEOG 004 – Introduction to Weather and Climate (3)
GEOG 011 – Introduction to Geographic Systems (3)
GEOG 030 – Field Studies and Methods in Geography (1)

LIST B: Select two (6-7 units)

GEOL 012 – Physical Oceanography (3)
ANTH 002 – Cultural Anthropology (3)
or ANTH 002H – Cultural Anthropology Honors (3)
GEOL 001 – Physical Geology (4)

REQUIRED SUBTOTAL.....	19–24
CSU General Education or IGETC CSU Pattern.....	37–39
DEGREE TOTAL	60

Geotech (GIS) – Occupational Skills Certificate

Top Code: 2206.10

The curriculum prepares students to apply entry level workplace geospatial competencies to solve industry specific problems in Technician/Technologist geospatial (GST) occupations. Job functions would include geospatial data entry, preparing maps using a GIS, interpret aerial photographs, and maintain GIS databases.

An occupational skills certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate appropriate fluency of basic geospatial data entry, digitization and conversion, and geospatial data building, modeling, or analysis.
2. Perform analysis of geospatial data to identify spatial relationships or display results of analyses, using maps, graphs, or tabular data.
3. Demonstrate the ability to effectively communicate through the design or preparation of graphic representations of Geographic Information Systems (GIS).
4. Maintain or modify existing Geographic Information Systems (GIS) databases.

Requirements for the Occupational Skills Certificate (12 units):

Recommended sequence:

GEOG 011 – Introduction to Geographic Information Systems and Techniques, with Lab (3)

GEOG 012 – Map Interpretation and Spatial Analysis (3)

GEOG 013 – Data Acquisition & Management (3)

GEOG 014 – Cartographic Design (3)

GEOLOGY

(Natural Sciences Division)

Geology – Associate Degree in Science for Transfer to CSU

Top Code: 1914.00

The Associate in Science Degree in Geology for Transfer provides a foundation in the physical sciences necessary for continued training at the upper division level for geology majors. It is a starting point for students who are preparing for careers in education, geoscience research, and government, where scientific and technical skills are in great demand.

All courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete a minimum of 28 units, as set forth below. Additional CSU transferable units may be used to reach the 60 unit maximum for the degree if necessary.

The Associate in Science Degree in Geology for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional PCC graduation requirements.)

Program Outcomes:

1. Demonstrate an understanding of the physical structure and morphology of the earth and operation of earth systems through the plate tectonic paradigm.
2. Articulate the general physical and biological history of the Earth through time.
3. Identify and classify earth materials, and demonstrate an understanding of their chemical makeup.

Associate in Science Degree in Geology for Transfer

REQUIRED CORE (28 units)

GEOL 001 – Physical Geology (4)
GEOL 002 – Historical Geology (4)
CHEM 001A – General Chemistry and Chemical Analysis (5)
CHEM 001B – General Chemistry and Chemical Analysis (5)
MATH 005A – Single Variable Calculus I (5)
MATH 005B – Single Variable Calculus II (5)

REQUIRED SUBTOTAL.....	28
CSU General Education or IGETC CSU Pattern.....	37–39
CSU transferable units to meet 60 maximum units for degree.....	1–3
DEGREE TOTAL	60

GERONTOLOGY

(Health Sciences Division)

Elder Care – Occupational Skills Certificate

Top Code: 1299.00

The Occupational Skills Certificate in Elder Care provides geriatrics and gerontology education and training for entry level health care professionals. Persons completing this certificate program are prepared to provide specialized, quality care for older adults. This certificate program is offered to students who are currently enrolled in the PCC Registered Nursing Program course NURS 050 or higher or the equivalent foundational nursing courses at other colleges or students who have graduated from the PCC Registered Nursing Program. Transcript reflecting equivalent courses with a grade of C or better is required.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Recognize the cultural, social, political, spiritual, health, and economic components of aging.
2. Provide basic care for elder clients.
3. Advocate for elder clients and families.

Required Units for the Occupational Skills Certificate: (12 units)

GERO 001 – Introduction to Gerontology (3)
NURS 050 – Foundational Nursing Care (3)
NURS 050L – Foundational Nursing Care – Clinical (5)
NURS 050S – Foundational Nursing – Seminar (1)

Gerontology – Certificate of Achievement, Associate in Science Degree

Top Code: 1309.00

Gerontology is concerned with the study and application of knowledge about the physical, social, and economic conditions of older people. Aging affects all aspects of human activity, thus gerontology is multidisciplinary in nature.

The program prepares students for careers in the field of aging. Graduates from this program can expect to find career placements in county councils on aging, area agencies on aging, social services agencies, housing authorities, long-term care, recreation facilities, and many other public and private agencies. Job titles in the field include:

With Completion of an Associate Degree:

Home Care Companion
Activity Director
Adult Educator
Transportation Coordinator
Meal Coordinator
Admission Coordinator
Marketing Coordinator
Travel/Tour Specialist
Home Safety/Home Organization Specialist

With Completion of a B.A. or M.A.:

Department of Human Services Worker
Senior Center Director
Administrator for assisted living
Administrator for independent living
Marketing Director
Care Manager
Geriatric Social Worker
Gerontologist

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate knowledge of relationships among older adults, their families, and society.
2. Apply current theory and research in the interdisciplinary field of gerontology and its role in society to assess biological, social, and psychological issues that impact older adults and those who work with and care for them.
3. Analyze aspects of ageism in American society and socially conscious behavior regarding the older population.
4. Apply acquired interdisciplinary knowledge of older adults in varied career applications, such as design of services for older adults, patient care, and engineering and technology for independent living.

Requirements for the Certificate of Achievement (18 units)

GERO 001 – Introduction to Gerontology (3)
GERO 022 – Directed Studies in Gerontology (3)
GERO 140 – Applied Health Care Management in Gerontology (3)
HUM 002 – Humanities, Science and Technology (3)
PSYC 022 – Developmental Psychology: The Adult (3)
SOC 022 – Sociology of Aging (3)

Requirements for the Associate in Science Degree – see page 101.

GRAPHIC COMMUNICATIONS TECHNOLOGY

(Visual Arts and Media Studies Division)

Apparel Graphics & Printing – Occupational Skills Certificate

Top Code: 0936.00

Students learn the parameters and printing applications for various types of textiles and ready-made apparel. Interdisciplinary classes that are part of this certificate broaden the student's knowledge of fabrics, garment construction, computer software used in the fashion industry, and design considerations for garment printing.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Discuss standard printing applications related to the garment industry.
2. Perform necessary functions to prepare screens and inks for textile printing.
3. Produce single- and multi-color graphic designs appropriate to screen printing on textiles.

Requirements for the Occupational Skills Certificate (17.5 units):

ART 031A – Color and Composition–Two Dimensional Design (3)
ART 056 (DMA 012) – Introduction to Digital Painting & Drawing (3)
FASH 110 – Fashion Illustration (3)
FASH 115 – Intermediate Computer-Assisted Fashion Graphics (2.5)
GRFX 115 – Beginning Screen Printing for Textile Applications (2)
GRFX 116 – Advanced Screen Printing for Textile Applications (2)
GRFX 135 – Intro to Electronic Prepress Techniques for Screen Printing (2)

Recommended electives

BUS 116 – Small Business Management (3)
FASH 128B – Surface Design Techniques–Dyeing, Painting, Batik (1)
GRFX 013 – Screen Printing–Plastics (3)
GRFX 245A – Basic Photoshop Techniques for Graphic Communications Technology (3)
GRFX 245B – Advanced Photoshop Techniques for Graphic Communications Technology (3)

Graphic Communications Technology – Computer Imaging and Composition – Certificate of Achievement, Associate in Science Degree

The curriculum prepares students to work in the imaging and electronic prepress areas of Graphic Communications industry. The program qualifies students to seek employment in entry-level and intermediate positions as electronic prepress technicians, digital color specialists and digital prepress operators.

Instruction is provided on Macintosh computers and specialized imaging equipment typically found in the production and prepress areas of the printing industry. Emphasis is on technical skills, common software applications and proper use of scanners, computers and digital output systems.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate an understanding of the academic and technical skills required to enter a career in Graphic Communications Technology.
2. Explain the ethical and social responsibilities that apply to a career in the Graphic Communications Technology field.

3. Explain the safety aspects of teamwork as it applies to the production requirements in the field of Graphic Communications Technology.
4. Demonstrate an understanding of the career paths available in Screen Printing, Electronic Prepress and Digital Imaging professions.
5. Understand the technical steps to good typographical and imaging skills for high-end print production.

Requirements for the Certificate of Achievement (30 units):

Recommended sequence:

Semester I

GRFX 010 – Introduction to Graphic Communications Technology (2)
 GRFX 199 – Introduction to Desktop Publishing (3)
 BIT 010 – Basic Computer Keyboarding (1)
 BIT 107 – Business Software–Windows (1)
 GRFX 030 – Basic Composition and Imaging (6)
 or GRFX 220 – Basic Digital Imaging (3)
 & GRFX 221 – Advanced Digital Imaging –Web (3)

Semester II

GRFX 031 – Advanced Composition and Imaging (6)
 GRFX 035 – Introduction to Electronic Prepress (2)

Semester III

GRFX 245A – Basic Photoshop Techniques for Graphic Communications Technology (3)
 GRFX 222 – Intermediate Digital Imaging–Print (3)

Semester IV

GRFX 036 – Electronic Image Assembly (1)
 GRFX 190 – Imaging Techniques for Large Format Printing (2)

Recommended electives

BUS 112 – Business English (3)
 CIS 010 – Introduction to Information Systems (3)
 PHOT 030 – Introduction to Digital Image Editing (3)
 PHOT 130 – Advanced Digital Image Editing (3)
 GRFX 192 – Introduction to Web Authoring (3)
 GRFX 300A – Production Printing (2)
 GRFX 300B – Production Printing (2)
 GRFX 103 – Ink, Paper and Quality Control (2)
 GRFX 104 – Bindery and Finishing Operations (2)

Requirements for the Associate in Science Degree – see page 101.

Electronic Prepress – Occupational Skills Certificate

Top Code: 0936.00

Accelerated course of study leading to an Occupational Skills Certificate in Electronic Prepress. This program is designed for an individual to enter or return to the workplace. This occupational skills certificate curricula responds to the knowledge and skills required by the industry for the electronic preflighting and imaging operations. In this segment of the printing industry current technical knowledge and software knowledge are required in order to gain employment.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Evaluate the components and specifications of a Graphic communications product, relating to the technical requirements of its final reproduction process(es).
2. Edit, combine and compose the text, graphic, and art components into a graphic product that fulfills the client's communication needs.
3. Demonstrate production flow skills to image, deliver, proof and archive the final print, document file.

Requirements for the Occupational Skills Certificate (17 units):

GRFX 035 – Introduction to Electronic Prepress (2)

GRFX 036 – Electronic Image Assembly (1)

GRFX 220 – Basic Digital Imaging (3)

GRFX 221 – Advanced Digital Imaging–Web (3)

GRFX 245A – Basic Photoshop Techniques for Graphic Communications Technology (3)

GRFX 245B – Advanced Photoshop Techniques for Graphic Communications Technology (3)

Graphic Communications Technology – Screen Printing – *Associate in Science Degree, Certificate of Achievement*

Top Code: 0936.00

This curriculum prepares students in the state-of-the-art techniques used to apply text, graphics and other images to a wide variety of surfaces and materials. Our goal is to prepare students to plan, anticipate, accurately prepare for and print, and thoroughly clean up a job in any one of the many printing areas. Students can learn the basics or expand on skills they have already attained. Instruction covers a wide range of techniques, inks and surfaces; safety and health issues; and training on common types of equipment. Employment opportunities are vast, in local sign, t-shirt and supply firms, both large and small. Many students opt to open their own businesses.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate basic and advanced techniques for screen printing on a variety of standard substrates.
2. Discuss organization, clean up and safety issues for a screen printing shop.
3. Produce accurately registered multiple color graphics on a variety of standard substrates with appropriate inks.
4. Demonstrate an understanding of the career paths available in Screen Printing.

Requirements for the Certificate of Achievement (34–39 units):

Recommended sequence:

Semester I

ART 031A – Color and Composition–Two Dimensional Design (3)

GRFX 115 – Beginning Screen Printing for Textile Applications (2)

GRFX 132A – Introductory Screen Printing (4)

or GRFX 013 – Screen Printing–Plastics (3)

& GRFX 134A – Screen Printing Fundamentals for Sales and Marketing (3)

Semester II

GRFX 116 – Advanced Screen Printing for Textile Applications (2)

GRFX 135 – Intro to Electronic Prepress Techniques for Screen Printing (2)

GRFX 132B – Intermediate Screen Printing (4)
or GRFX 113 – Intermediate Screen Printing (3)
& GRFX 134B – Screen Printing for Sales and Marketing (3)

Semester III

GRFX 137 – Screen Printing Techniques for Flat Stock (2)
GRFX 220 – Basic Digital Imaging (3)
GRFX 133A – Advanced Screen Printing for Plastics and Rigid Substrates (4)
or GRFX 114A – Production Screen Printing (3)
& GRFX 134C – Screen Printing–Two and Three Colors (2)

Semester IV

GRFX 221 – Advanced Digital Imaging –Web (3)
GRFX 133B – Production Screen Printing (5)
or GRFX 114B – Advanced Screen Printing (3)
& GRFX 134D – Screen Printing–Four and Six Colors (2)

Recommended electives

ART 050A (DMA 020A) – Introduction to Graphic Design & Advertising (3)
BUS 112 – Business English (3)
BUS 116 – Small Business Management (3)
GRFX 245A – Basic Photoshop Techniques for Graphic Communications Technology (3)

Requirements for the Associate in Science Degree – see page 101.

Screen Printing for Small Business – *Occupational Skills Certificate*

Top Code: 0936.00

This is an accelerated course of study designed for the individual seeking to understand the basic requirements of owning and operating a small business in Screen Printing. Current approaches emphasize accurate and efficient printing of various jobs, including flatwork and textiles; good business planning and practices; and successful client relations.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Perform independently basic functions for a standard variety of screen printing applications.
2. Describe the equipment, studio layout and safety issues related to a screen printing business.
3. Identify key concerns for owning, promoting and managing a screen printing business.

Requirements for the Occupational Skills Certificate (16 units):

ART 031A – Color and Composition–Two Dimensional Design (3)
BUS 116 – Small Business Management (3)
GRFX 013 – Screen Printing–Plastics (3)
GRFX 113 – Intermediate Screen Printing (3)
GRFX 220 – Basic Digital Imaging (3)

Textile Printing – Occupational Skills Certificate

Top Code: 1030.00

This two-semester program of study is designed to concentrate on intermediate- to advanced-level work in textile Screen Printing. Students work with many contemporary inks on a variety of textile substrates. Training includes technical core classes, classes in basic design principles, and classes to build awareness of the fashion business.

Program Outcomes:

1. Communicate with client to determine need for, and to coordinate production of, printed textile products.
2. Create and prepare appropriate digital artwork for printed production.
3. Compare, choose, and apply best print application depending on textile & substrate.
4. Produce printed products through screen printing or dye sublimation techniques.

Requirements for the Occupational Skills Certificate (15 units):

Semester I

ART 031A – Color and Composition–Two Dimensional Design (3)

FASH 009 – Beginning Textiles (3)

GRFX 115 – Beginning Screen Printing for Textile Applications (2)

Semester II

FASH 002 – Introduction to Fashion Industry (3)

GRFX 116 – Advanced Screen Printing for Textile Applications (2)

GRFX 135 – Intro to Electronic Prepress Techniques for Screen Printing (2)

HISTORY

(Social Sciences Division)

History – Associate in Arts Degree for Transfer to CSU

Top Code: 2205.00

Knowledge of the past is a prerequisite for understanding the present and preparing for the future. The Associate in Arts in History for Transfer Degree offers an array of courses designed to enable students to comprehend how they, their nation, and the contemporary world have been shaped by historical events and forces. It is only by studying the history of other civilizations and cultures that we hope to gain perspective on our own. In addition to producing teachers and historical researchers, the AA-T in History helps prepare students for other careers. Majoring in history is excellent preparation for students interested in a teaching career, the legal profession, or advanced work in the discipline. Students wishing to become business executives, administrators, and public servants profit immensely by gaining the methodological skills of the historian. Historians learn to gather, synthesize, analyze, and interpret evidence; they become skilled in presenting their conclusions to a general audience in a lucid and logical manner. History is an excellent foundation for a broadly based education in the liberal arts.

The Associate in Arts in History for Transfer Degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Program Outcomes:

1. Demonstrate through original written and/or oral analysis the ability to identify important events in historical eras; evaluate variables of historical phenomena; and analyze the causes and impact of significant change in a global context.

2. Demonstrate awareness and critique the value of varied sources of historical information including professional lectures, secondary texts, primary documents, visual arts, fiction, oral histories, community studies, and/or current journalistic reports.
3. Demonstrate responsibility as self-directed listeners, readers, and researchers.
4. Compare and contrast the experiences and issues of subsets of minorities with that of mainstream in power, including concerns of race, class, and gender.
5. Demonstrate respect for diversity of opinions on historical debates.
6. Apply the analysis of history to create a plan for fulfilling civic responsibilities as community and international citizens.

Associate in Arts in History for Transfer Degree

Required Core: 6 units

- HIST 007A – United States History to 1876 (3)
 HIST 007B – United States History from 1876 (3)

LIST A: Select two courses (6 units)

- HIST 002A – History of World Civilizations to 1500 (3)
 or HIST 001A – History of European Civilization to 1715 (3)
 HIST 002B – History of World Civilizations from 1500 (3)
 or HIST 001B – History of European Civilization from 1715 (3)

LIST B: Select one course from each group not already used (6 units)

GROUP 1

- HIST 002A – History of World Civilizations to 1500 (3)
 HIST 002B – History of World Civilizations from 1500 (3)
 HIST 009A – Latin America: Pre-Columbian to 1825 (3)
 HIST 009B – Latin America: 1825 to Present (3)
 HIST 012 – The North American Indian (3)
 HIST 016 – History of the Middle East (3)
 HIST 018 – History of South Asia, Southeast Asia, and the Pacific (3)
 HIST 019 – History of China, Japan, and Korea (3)
 HIST 025B – Women in American Society (3)
 HIST 027A – Traditional Africa (3)
 HIST 027B – Modern Africa (3)
 HIST 029A – African American History to 1865 (3)
 HIST 029B – African American History from 1865 (3)
 HIST 030 – History of Mexico (3)
 HIST 031 – History of Mexican Americans in the United States (3)
 HIST 041 – History of Asian Pacific Americans (3)

GROUP 2

- ANTH 002 – Cultural Anthropology (3)
 ANTH 003 – Introduction to Archaeology (3)
 ECON 001A – Principles of Economics (3)
 ECON 001B – Principles of Economics (3)
 GEOG 002 – Cultural Geography (3)
 HIST 001A – History of European Civilization to 1715 (3)
 HIST 001B – History of European Civilization from 1715 (3)
 HIST 002A – History of World Civilizations to 1500 (3)
 HIST 002B – History of World Civilizations from 1500 (3)
 HIST 005A – History of Great Britain to 1714 (3)
 HIST 005B – History of Great Britain from 1714 (3)

- HIST 008 – History of California (3)
- HIST 025A – Great Personalities in U.S. History (3)
- HIST 025C – The American West (3)
- HIST 025D – America’s Relations with Other Nations (3)
- HIST 025F – America and the Two World Wars (3)
- HIST 025I – Issues of the Vietnam War (3)
- HIST 045A – Religious Issues, Personalities, and Values (3)
- HIST 050 – History and Historians (3)
- PHIL 037 – Philosophy of Religion (3)
- POLS 001 – Introduction to American Government and Politics (3)
- POLS 002 – Comparative Government (3)
- RELG 001 – Religious Issues, Personalities, and Values (3)
- SOC 014 – Introduction to Ethnic Studies (3)

REQUIRED SUBTOTAL.....	18
CSU General Education or IGETC CSU Pattern.....	37–39
Transferable Electives (as needed to reach 60 transferable units)	
DEGREE TOTAL	60

HOSPITALITY MANAGEMENT

(Business Division)

Hospitality Management – Associate in Science Degree, Certificate of Achievement
 Top Code: 1307.00

The Hospitality Management curriculum offers the student the opportunity to receive an Associate Degree and/or a Hospitality Management Certificate of Achievement, as well as fulfill many of the required coursework of existing four-year Hospitality Management Programs throughout the country. The curriculum prepares students to seek entry-level management positions in the hospitality management industry. Related career opportunities abound in the industry, both locally and on a global basis and include such titles as Front Desk Manager, Social Director, Caterer, Hospitality Supervisor, Meeting Planner, Recreational Director and Travel Director. Graduates of the program have the potential of working throughout the world for major hotel, motel and restaurant companies, private clubs, business and industry food-service providers, theme parks and recreational facilities, consulting firms and other related industries.

The curriculum within this program includes a survey of the hospitality industry: operations management, financial management, human resource management, marketing and sales, accounting, business communications, mathematics, leadership, computer technology applications, and more, providing a practical base of hospitality management knowledge and abilities. The Program provides a work site/internship component providing the student with on-the-job experience with local employers while attending Pasadena City College.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

- Program Outcomes:**
1. Identify major components of hospitality industry and educational pathways.
 2. Identify local health laws and basic food handling safety.
 3. Demonstrate the knowledge of fundamental principles of leadership and model the behavior of effective leaders.
 4. Develop a global perspective and an ability to work with diverse groups in multicultural settings.
 5. Demonstrate knowledge and comprehension of sanitation and safety regulations in the hospitality industry.

Recommended sequence of courses (22 units):

Semester I

BIT 025 – Survey of Computer Technology in Business (3)

BUS 012A – Business Law (3)

HOSP 001 – Introduction to the Hospitality Industry (3)

HOSP 002 – Hospitality Supervision and Human Resource Management (3)

Semester II

ACCT 010 – Bookkeeping–Accounting (4)

HOSP 004 – Hospitality Sanitation, Safety & Environmental Issues Management (3)

HOSP 130 – Hospitality Marketing, Sales, and Advertising (3)

Recommended electives:

BUS 011A – Business Communications (3)

HOSP 101 – Hospitality Internship (3)

Requirements for the Associate in Science Degree – see page 101.

HUMANITIES

(Social Sciences Division)

Humanities – Associate in Arts Degree

Top Code: 4903.00

The term *Humanities* refers to a broad range of subjects, including art, architecture, history, music, dance, languages, literature, philosophy, ethics, and religion. Students who select Humanities as an area of emphasis study the achievements of the human heart and mind; they work within a variety of disciplines in order to acquire a deeper understanding of themselves, civilization, and the world. Students have the opportunity to study the diverse strands of human thought and culture. They train for a career where a broad humanistic understanding is appropriate, or acquire self-cultivation through interdisciplinary study. This area of emphasis is intended to align student course work with preparation for transfer to universities in such majors as Architecture, Art, English, Foreign Languages, History, Humanities, Music, Philosophy, Religious Studies, Theatre Arts, and other similar fields of study. Such majors are widely available in most CSU, UC, and private schools.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate a broad understanding of the Humanities and their relation to the student and the student's own goals, world civilization, and the natural world.
2. Demonstrate an understanding of the achievements of the human mind and heart in a variety of disciplines, such as Art, English Literature, Theatre Arts, Foreign Languages, History, Philosophy, and Religious Studies.
3. Be prepared to pursue preferred areas of study at transfer universities enriched by a strong background in the Humanities.

Requirements for the area of emphasis (18 units minimum)

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete 18 units with at least 3 units in three of the disciplines listed below.

Architecture

ARCH 010A – Architectural Design Fundamentals (3)
ARCH 011 – Introduction to Architecture (2)
ARCH 012A – Visual Communications I (3)
ARCH 024A – History of Architecture (3)
ARCH 024B – History of Architecture (3)

Art

ART 001A – History of Western Art–Prehistoric through Medieval (3)
ART 001B – History of Western Art (3)
ART 002 – History of African and African-American Art (3)
ART 003A – History of Asian Art (3)
ART 003B – History of Asian Art (3)
ART 004A – History of Ancient Art in the West (3)
ART 004B – History of European Medieval Art (3)
ART 004C – History of European Renaissance and Baroque Art (3)
ART 004D – History of Modern Art (3)
ART 005 – Art Fundamentals (3)
ART 007 – Pre-Columbian Art (3)
ART 008 – History of Mexican and Chicano Art (3)
ART 009 – History of Islamic Art (3)

English

ENGL 005A – Creative Writing (3)
ENGL 005B – Creative Writing (3)
ENGL 006 – Short Story Writing (3)
ENGL 008 – Writing Poetry (3)
ENGL 009 – Creative Nonfiction (3)
ENGL 010 – Introduction to Linguistics (3)
 or LING 010 – Introduction to Linguistics (3)
ENGL 011 – History of English Language (3)
 or LING 011 – History of English Language (3)
ENGL 012 – Intercultural Communication (3)
 or LING 012 – Intercultural Communication (3)
ENGL 024 – A Literature in Translation (3)
ENGL 025A – Interpreting Modern Literature (3)
ENGL 025C – Women in Literature (3)
ENGL 025D – Science Fiction and Fantasy (3)
ENGL 025E – Literature of Horror (Gothic Novel) (3)
ENGL 025F – Comedy and Literature (3)
ENGL 025G – Mystery and Crime Fiction (3)
ENGL 025H – American Journeys (3)
ENGL 025I – Post-Colonial Literatures (3)
ENGL 025J – Utopian and Dystopian Literature (3)
ENGL 026 – Introduction to Literary Theory and Criticism (3)
ENGL 030A – American Literature (3)
ENGL 030B – American Literature (3)
ENGL 030C – American Literature (3)
ENGL 034 – Major Novelist (1)

ENGL 035 – Major Dramatist (1)
 ENGL 036 – Major Poet (1)
 ENGL 037 – Major Critic (1)
 ENGL 044A – World Literature: Antiquity to 1500 (3)
 ENGL 044B – World Literature: 1500–1800 A.D. (3)
 ENGL 044C – World Literature: 1800–Mid 20th Century (3)
 ENGL 045A – Literature of the Bible (3)
 ENGL 045B – Literature of the Bible (3)
 ENGL 046A – English Literature (3)
 ENGL 046B – English Literature (3)
 ENGL 047 – Mexican and Chicano Literature (3)
 ENGL 048 – Asian Literature (3)
 ENGL 049A – Film as Dramatic Literature (3)
 ENGL 049B – Film as Dramatic Literature (3)
 ENGL 050 – African-American Literature (3)
 ENGL 051 – Native American Mythology and Literature (3)
 ENGL 052 – Asian American Literature (3)
 ENGL 053 – Interpreting Poetry (3)
 ENGL 054 – California Literature (3)
 ENGL 057 – Modern Drama (3)
 ENGL 059 – Children’s Literature (3)
 ENGL 060 – Masterpieces of Drama (3)
 ENGL 061 – Introduction to the Novel (3)
 ENGL 078A – Introduction to Shakespeare (3)
 ENGL 078B – Introduction to Shakespeare (3)
 ENGL 082A – Introduction to Mythology (3)
 ENGL 082B – Introduction to Mythology (3)
 ENGL 082C – Introduction to Mythology (3)

Foreign Language

ASL 001 – Elementary American Sign Language (4)
 ASL 002 – Elementary American Sign Language (4)
 ASL 010C – American Sign Language (3)
 ASL 010D – American Sign Language (3)
 ARBC 001 – Elementary Arabic (5)
 ARBC 002 – Elementary Arabic (5)
 ARMN 001 – Elementary Armenian (5)
 ARMN 002 – Elementary Armenian (5)
 CHIN 001 – Elementary Chinese (Mandarin) (5)
 CHIN 002 – Elementary Chinese (Mandarin) (5)
 CHIN 002A – Elementary Chinese (Mandarin) for Advanced Beginners (5)
 CHIN 003 – Intermediate Chinese (Mandarin) (5)
 CHIN 004 – Intermediate Chinese (Mandarin) (5)
 CHIN 005 – Advanced Chinese Reading and Composition (3)
 CHIN 008A – Introduction to Chinese Conversation (Mandarin) (2)
 CHIN 008B – Introduction to Chinese Conversation (Mandarin) (2)
 CHIN 009A – Chinese Conversation (Mandarin) (2)
 CHIN 009B – Chinese Conversation (Mandarin) (2)
 CHIN 009C – Chinese Conversation (Mandarin) (2)
 CHIN 010 – Chinese Civilization (3)
 CHIN 012 – Chinese Literature in Translation (3)
 CHIN 022 – Chinese Calligraphy (3)
 CHIN 050 – Chinese Cinema (3)
 FRNC 001 – Elementary French (5)

FRNC 002 – Elementary French (5)
 FRNC 003 – Intermediate French (5)
 FRNC 004 – Intermediate French (5)
 FRNC 006 – Introduction to the Study of French and Francophone Literature (4)
 FRNC 008A – French Conversation (2)
 FRNC 008B – French Conversation (2)
 FRNC 009A – French Conversation (2)
 FRNC 009B – French Conversation (2)
 FRNC 010 – French Civilization (3)
 FRNC 011 – Translating from French to English (2)
 FRNC 012 – French Literature in Translation (3)
 FRNC 014 – Writing in French (3)
 FRNC 015 – Reading in French (3)
 FRNC 016 – French Culture and Communication (3)
 FRNC 050 – French Cinema (3)
 GRMN 001 – Elementary German (5)
 GRMN 002 – Elementary German (5)
 GRMN 003 – Intermediate German (5)
 GRMN 004 – Intermediate German (5)
 GRMN 005 – Introduction to German Literature (3)
 GRMN 008A – Introduction to German Conversation (2)
 GRMN 008B – Introduction to German Conversation (2)
 GRMN 008C – Introduction to German Conversation (2)
 GRMN 009A – German Conversation (2)
 GRMN 009B – German Conversation (2)
 GRMN 009C – German Conversation (2)
 GRMN 010 – German Civilization (3)
 GRMN 012 – German Literature in Translation (3)
 ITAL 001 – Elementary Italian (5)
 ITAL 002 – Elementary Italian (5)
 ITAL 003 – Intermediate Italian (5)
 ITAL 004 – Intermediate Italian (5)
 ITAL 008A – Introduction to Italian Conversation (2)
 ITAL 008B – Introduction to Italian Conversation B (2)
 ITAL 009A – Italian Conversation (2)
 ITAL 009B – Italian Conversation (2)
 ITAL 009C – Italian Conversation (2)
 ITAL 010 – Italian Civilization (3)
 ITAL 012 – Introduction to Italian Literature (3)
 ITAL 050 – Italian Film as Dramatic Literature (3)
 JAPN 001 – Elementary Japanese (5)
 JAPN 002 – Elementary Japanese (5)
 JAPN 003 – Intermediate Japanese (5)
 JAPN 004 – Intermediate Japanese (5)
 JAPN 005 – Advanced Reading and Composition (3)
 JAPN 008A – Introduction to Japanese Conversation (2)
 JAPN 008B – Introduction to Japanese Conversation (2)
 JAPN 009A – Japanese Conversation (2)
 JAPN 009B – Japanese Conversation (2)
 JAPN 009C – Japanese Conversation (2)
 JAPN 010 – Japanese Civilization (3)
 JAPN 011 – Inside Japan (1)
 JAPN 012 – Japanese Literature in Translation (3)
 LATN 001 – Elementary Latin (5)

LATN 002 – Elementary Latin (5)
 PORT 001 – Elementary Portuguese–Level 1 (5)
 PORT 002 – Elementary Portuguese–Level 2 (5)
 PORT 003 – Intermediate Portuguese (5)
 PORT 004 – Intermediate Portuguese (5)
 RUSS 001 – Elementary Russian (5)
 RUSS 002 – Elementary Russian (5)
 RUSS 003 – Intermediate Russian (5)
 RUSS 004 – Intermediate Russian (5)
 RUSS 011 – Russian Civilization (3)
 SPAN 001 – Elementary Spanish (5)
 SPAN 002 – Elementary Spanish (5)
 SPAN 002A – Spanish for Spanish Speakers (5)
 SPAN 003 – Intermediate Spanish (5)
 SPAN 004 – Intermediate Spanish (5)
 SPAN 005 – Introduction to Spanish Literature (3)
 SPAN 006A – Introduction to Spanish-American Literature (3)
 SPAN 006B – Introduction to Spanish-American Literature (3)
 SPAN 008A – Introduction to Spanish Conversation (2)
 SPAN 008B – Introduction to Spanish Conversation (2)
 SPAN 009A – Spanish Conversation (2)
 SPAN 009B – Spanish Conversation (2)
 SPAN 009C – Spanish Conversation (2)
 SPAN 012 – Spanish Literature in Translation (3)
 SPAN 025 – Spanish Composition (3)
 SPAN 031 – Language of the Barrio (3)
 SPAN 042A – Civilization of Spain and Portugal (3)
 SPAN 042B – Civilization of Spain and Portugal (3)
 SPAN 044A – Civilization of Latin America (3)
 SPAN 044B – Civilization of Latin America (3)
 SPAN 050 – Spanish and Latin American Cinema (3)

History

HIST 001A – History of European Civilization to 1715 (3)
 HIST 001B – History of European Civilization from 1715 (3)
 HIST 002A – History of World Civilizations to 1500 (3)
 HIST 002B – History of World Civilizations from 1500 (3)
 HIST 005A – History of Great Britain to 1714 (3)
 HIST 005B – History of Great Britain from 1714 (3)
 HIST 007A – United States History to 1876 (3)
 HIST 007B – United States History from 1876 (3)
 HIST 008 – History of California (3)
 HIST 009A – Latin America: Pre-Colombian to 1825 (3)
 HIST 009B – Latin America: 1825 to the Present (3)
 HIST 012 – The North American Indian (3)
 HIST 016 – History of the Middle East (3)
 HIST 018 – History of South Asia, Southeast Asia and the Pacific (3)
 HIST 019 – History of China, Japan and Korea (3)
 HIST 024A – Special Topics in History–Africa (3)
 HIST 024B – Special Topics in History–Asia (3)
 HIST 024C – Special Topics in History–Europe (3)
 HIST 024D – Special Topics in History–Latin America (3)
 HIST 024E – Special Topics in History–Middle East (3)
 HIST 024F – Special Topics in History–United States (3)

HIST 024G – Special Topics in History–World (3)
HIST 025A – Great Personalities in U.S. History (3)
HIST 025B – Women in American Society (3)
HIST 025C – The American West (3)
HIST 025D – America’s Relations with Other Nations (3)
HIST 025E – Arts And Crafts Movement in the U.S. (3)
HIST 025F – America and the Two World Wars (3)
HIST 025I – Issues of the Vietnam Era (3)
HIST 029A – African American History to 1865 (3)
HIST 029B – African American History from 1865 (3)
HIST 030 – History of Mexico (3)
HIST 031 – History of Mexican Americans in the United States (3)
HIST 038 – History of Religion in America (3)
HIST 041 – History of Asian Pacific Americans (3)
HIST 050 – History and Historians (3)
HIST 027A – Traditional Africa (3)
HIST 027B – Modern Africa (3)

Humanities

HUM 001 – Introduction to the Humanities (3)
HUM 002 – Humanities, Science and Technology (3)
HUM 003 – Humanities and the Social Sciences (3)
HUM 004 – Humanities through the Arts (3)

Music

MUSC 007A – Music History and Literature (3)
MUSC 007B – Music History and Literature (3)
MUSC 021 – Music Appreciation (3)
MUSC 022 – Music in the Contemporary World (3)
MUSC 023 – Music Cultures of the World (3)
MUSC 024A – The Jazz Experience: Evolution and Essence (3)
MUSC 024B – History of Rock Music (3)
MUSC 025 – African American Music (3)
MUSC 026 – Latin American Music (3)
MUSC 027 – Asian Music (3)
MUSC 028 – History of Opera (3)

Philosophy

PHIL 001 – Introduction to Philosophy (3)
PHIL 003 – Ethics (3)
PHIL 007 – Contemporary Moral Problems (3)
PHIL 008 – Philosophy and Humanness (3)
PHIL 020A – History of Ancient Philosophy (3)
PHIL 020B – History of Modern Philosophy (3)
PHIL 025 – Introduction to Critical Thinking (3)
PHIL 030 – Logic (3)
PHIL 031 – Contemporary Chicano Philosophy (3)
PHIL 033 – Introduction to Symbolic Logic (3)
PHIL 037 – Philosophy of Religion (3)

Religious Studies

RELG 001 – Religious Issues, Personalities and Values (3)
RELG 002 – Comparative Religions: Far East (3)
RELG 003 – Comparative Religions: Near East (3)

Theatre Arts

THRT 002A – Acting I (3)
THRT 002B – Acting II (3)
THRT 002C – Advanced Acting Fundamentals (3)
THRT 005A – Theatre History I (3)
THRT 005B – Theatre History II (3)
THRT 006 – Play Writing (3)
CINE 007A – Early Film History (3)
CINE 007B – Contemporary Film History (3)
THRT 008 – Voice and Movement for the Performer (3)
THRT 012A – Technical Theater (4)
THRT 012B – Advanced Technical Theater (4)

Requirements for the Associate in Arts Degree – see page 97.

JOURNALISM

(Visual Arts and Media Studies Division)

Journalism – Associate in Arts Degree for Transfer to CSU

Top Code: 0602.00

The Journalism AA-T curriculum prepares students to seek employment with print and online newspapers, magazines, and digital publications. Graduates will be prepared to work as reporters, writers, news researchers, feature article writers, and editorial and design specialist. The curriculum features experience with computerized desktop publishing/editing and online publishing software.

This area of emphasis is intended to align students with preparation for transfer into the CSU system in the Journalism major sequence. It includes theory of mass communications, introduction to news writing, and practical experience reporting, writing and producing a weekly newspaper and its online edition.

The Associate in Arts in Journalism for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Program Outcomes:

1. Cooperate with editors and other staff members in a news room environment to produce and publish a weekly campus newspaper.
2. Produce a portfolio showing a range of published stories demonstrating skills in writing news, feature, opinion, and sports stories.
3. Direct staff members and organize page content to produce a weekly newspaper. Students will also act as publication editors and design the pages.

Associate in Arts in Journalism for Transfer Degree**Required core: 10 units**

COMM 001 – Survey of Mass Communication (3)
JOUR 002 – Beginning Journalism (3)
JOUR 007A – Newswriting and Make-Up (4)

LIST A: Select one course (3 units)

JOUR 004A – Reporting and Newswriting (3)
 JOUR 007B – Newswriting and Make-Up (4)
 JOUR 009 – Public Relations and Organizational Communication (3)
 JOUR 023 – Photojournalism (3)

LIST B: Select two courses (6 units)

ECON 001A – Principles of Economics (3)
 or ECON 001B – Principles of Economics (3)
 ENGL 001C – Intermediate Composition: Critical Thinking and Argument (4)
 PHOT 021 – Elementary Photography (3)
 POLS 001 – Introduction to American Government and Politics (3)
 POLS 002 – Comparative Government (3)
 PHIL 025 – Introduction to Critical Thinking (3)
 PHIL 030 – Logic (3)
 or PHIL 033 – Introduction to Symbolic Logic (3)
 SPCH 006 – Argumentation and Debate (3)
 SPCH 013 – Introduction to Speech Communication (3)
 STAT 050 – Elementary Statistics (4)
 or STAT 018 – Statistics for Social and Behavioral Sciences (4)

REQUIRED SUBTOTAL.....	19
CSU General Education or IGETC CSU Pattern.....	37–39
Transferable Electives (as needed to reach 60 transferable units)	
DEGREE TOTAL	60

Journalism – Photojournalism – Associate in Science Degree, Certificate of Achievement

Top Code: 0602.00

The curriculum prepares students for employment in news, editorial or public relations organizations as photographers. Emphasis is placed on photography for print, web and mobile publications. Students completing the program will have developed a portfolio.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Work as self-directed individuals and team members to produce and publish a weekly campus newspaper.
2. Demonstrate an awareness of the principles and responsibilities of the professional photojournalist, including a commitment to accuracy, fairness, depth, and social conscience.
3. Produce a portfolio of photographs appropriate for professional publication that demonstrates the ability to gather, organize, report and interpret newsworthy events and information.

Requirements for the Certificate of Achievement (19 units):

Recommended sequence:

Semester I

JOUR 002 – Beginning Journalism (3)
 JOUR 021 – Beginning Press Photography (3)
 or PHOT 021 – Introduction to Black and White Photography (3)

Semester II

JOUR 022 – Advanced Press Photography (3)
PHOT 031 – Beginning Digital Photography (3)

Semester III

JOUR 107A – Online Journalism (4)
or JOUR 107B – News Leadership (4)

Semester IV

JOUR 023 – Photojournalism (3)

Recommended electives

ART 031A – Color and Composition – Two Dimensional Design (3)
COMM 001 – Survey of Mass Communication (3)
JOUR 004A – Reporting and Newswriting (3)
JOUR 005 – Magazine and Small Publications (3)
JOUR 007A – Newswriting and Make-Up (4)
JOUR 009 – Public Relations and Organizational Communication (3)
JOUR 110 – Journalism Field Practice (3)
PHOT 030 – Introduction to Digital Image Editing (3)

Requirements for the Associate in Science Degree – see page 101.

Journalism – Printed Media – Associate in Science Degree, Certificate of Achievement

Top Code: 0602.00

The curriculum prepares students to seek employment with newspapers, magazines, and organizational publications such as house organs, newsletters, and annual reports. Graduates will be prepared to work as reporters, writers, news researchers, feature article writers, and editorial and design specialists. The curriculum features computerized desktop publishing/editing and online publishing.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate skills in writing news, feature, opinion, and sports stories by producing a portfolio showing a range of published stories.
2. Contribute to production of a weekly newspaper by participating in story assignment, editing, page design and production.

Requirements for the Certificate of Achievement (18 units):

Recommended sequence:

Semester I

JOUR 002 – Beginning Journalism (3)

Semester II

JOUR 004A – Reporting and Newswriting (3)
JOUR 007A – Newswriting and Make-Up (4)

Semester III

JOUR 007B – Newswriting and Make-Up (4)
or JOUR 107A – Online Journalism (4)
or JOUR 107B – News Leadership (4)

Semester IV

JOUR 007B – Newswriting and Make-Up (4)
or JOUR 107A – Online Journalism (4)
or JOUR 107B – News Leadership (4)

Recommended electives

COMM 001 – Survey Of Mass Communication (3)
JOUR 005 – Magazine and Small Publications (3)
JOUR 009 – Public Relations and Organizational Communication (3)
JOUR 021 – Beginning Press Photography (3)
JOUR 110 – Journalism Field Practice (3)

Requirements for the Associate in Science Degree – see page 101.

KINESIOLOGY

(Kinesiology, Health, and Athletics Division)

Kinesiology – Associate in Arts Degree for Transfer to CSU

Top Code: 1270.00

Kinesiology is the study of movement as it relates to physical activity, health, disease prevention, exercise, and sport. Kinesiology Majors are grounded in an interdisciplinary body of knowledge which encompasses the biological, psychological, physical, and social sciences. They use this knowledge to understand how the human body responds to movement, exercise, exercise training, and overall fitness. Kinesiology majors can find employment in health care, coaching, sports officiating, and athletic training. Public schools also recruit kinesiologists for their physical education departments or programs. Lastly, a baccalaureate degree in Kinesiology can also lead to advanced degrees in Physical Therapy, Occupational Therapy, or Medical School.

Students must complete a minimum of 21 units.

The Associate in Arts Degree in Kinesiology for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional PCC graduation requirements)

Pasadena City College may certify a maximum of 39 units as having fulfilled the CSU lower division general education requirements.

Program Outcomes:

1. Identify and apply basic physiological principles of human movement in exercise and sports settings.
2. Identify and apply fundamental techniques to improve individual kinesthetic sport specific skills.

Associate in Arts Degree in Kinesiology for Transfer

REQUIRED CORE (14 units)

ANAT 025 – Human Anatomy (4)
KINT 003 – Introduction to Kinesiology (3)
PYSO 001 – Human Physiology (4)

MOVEMENT-BASED COURSES (Minimum 3 units)

Select a maximum of one (1) course from any three (3) of the following areas:

AQUATICS

KINA 003A– Beginning Swimming I (1)
KINA 003B – Advanced Beginning Swimming II (1)
KINA 003C – Intermediate Swimming (1)
KINA 003D – Advanced Swimming and Diving (1)
KINA 028A – Beginning Aquatic Fitness Activities (1)
KINA 028B – Intermediate Aquatic Activities (1)

COMBATIVES

KINA 034A – Self Defense (1)
KINA 034B – Intermediate Self-Defense (1)
KINA 048A – Beginning Fencing (1)
KINA 048B – Intermediate Fencing (1)
KINA 048C – Advance Fencing (1)

DANCE

DANC 005A – Social Dance (1)
DANC 005B – Social Dance (1)
DANC 006A – Beginning Tap (1)
DANC 009A – Modern Dance I (1)
DANC 009C – Modern Dance III (1)
DANC 011A – Ballet I (1)
DANC 011C – Ballet III (1)
DANC 013 – Pilates-Based Method for Alignment and Correction (1)
DANC 015A – Beginning Jazz Dance (1)

FITNESS

KINA 029A – Body Building (1)
KINA 029B – Intermediate Body Building (1)
KINA 029C – Advanced Body Building (1)
KINA 030 – Fitness Testing and Independent Exercise (1)
KINA 032A – Beginning Fitness Activities (1)
KINA 032B – Intermediate Fitness Activities (1)
KINA 032C – Advanced Fitness Activities (1)
KINA 033 – Stretching Fitness Activity (1)
KINA 036 – Aerobic Fitness (1)
KINA 038 – Cardiovascular Conditioning (1)
KINA 039A – Cycling For Fitness – Outdoor (1)
KINA 039B – Cycling For Fitness – Stationary, Indoor (1)

TEAM SPORTS

KINA 046A – Beginning Badminton (1)
KINA 046B – Intermediate Badminton (1)
KINA 046C – Advanced Badminton (1)

KINA 054A – Beginning Tennis (1)
 KINA 054B – Intermediate Tennis (1)
 KINA 054C – Advanced Tennis (1)
 KINA 065A – Beginning Basketball (1)
 KINA 065B – Intermediate Basketball (1)
 KINA 065C – Advanced Basketball (1)
 KINA 069 – Soccer (1)
 KINA 081A – Beginning Volleyball (1)
 KINA 081B – Intermediate Volleyball (1)
 KINA 081C – Advanced Volleyball (1)

LIST A: Select 2 courses from below (7–10 units)

STAT 018 – Statistics for Behavioral and Social Sciences (4)
 or STAT 050 – Elementary Statistics (4)
 BIOL 011 – Human Biology (4)
 or BIOL 010A – Cellular Biology, Genetics, and Evolution (4)
 CHEM 002A – Chemistry – General, Organic and Biochemistry (4)
 or CHEM 001A – General Chemistry and Chemical Analysis (5)
 PHYS 002A – General Physics (5)
 or PHYS 001A – General Physics (5)
 KINT 005 – First Aid–Responding To Emergencies (3)

REQUIRED SUBTOTAL..... 21–24
 CSU General Education or IGETC CSU Pattern..... 37–39

DEGREE TOTAL 60

Kinesiology & Wellness – Associate in Arts Degree

Top Code: 4901.00

The area of emphasis in Kinesiology and Wellness provides for a student with an understanding of kinesiology, health promotion, and the mechanics of human bodily movement. The word kinesiology comes from the Greek, kinesis, which means to move. Kinesiology is the study of the art and science of human movement. The discipline of Kinesiology is dedicated to the study of human movement as it relates to sport, dance, and exercise. This area of emphasis is intended to align student course work with preparation for transfer to universities in such bachelor degree majors as Kinesiology, Exercise Science, Physical Education, and other similar fields of study. Kinesiology and Wellness is designed for the student preparing, in the long run, to become a physical education teacher, to study a health-related profession, or to pursue a career in other related fields that typically require a bachelor’s degree.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate a competence in human anatomy, chemistry, physiology, and biomechanical movement.
2. Understand the behavioral, historical and sociological aspects of human movement.
3. Comprehend theoretical approaches and major concepts of health and nutrition.
4. Have knowledge and apply the fundamentals, rules and regulations of a variety of sports.

**Requirements for the area of emphasis
(22 units minimum)**

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete 22 units with a minimum number of units in each of the categories listed below.

HED 044 – Health Education (3)
KINT 003 – Introduction to Kinesiology (3)
KINT 097 – Theory and Development of Fitness and Wellness (3)
or KINT 014 – Wellness for Life (3)

Kinesiology and Movement (3 units minimum; maximum 4 units):

HED 020 – Independent Study (1)
KATH 070 – Off-Season Conditioning Intercollegiate–Badminton (1)
KATH 071 – Off-Season Conditioning Intercollegiate–Baseball (1)
KATH 072 – Off-Season Conditioning Intercollegiate–Basketball (1)
KATH 073 – Off-Season Conditioning Intercollegiate–Cross Country (1)
KATH 074 – Off-Season Conditioning Intercollegiate–Football (1)
KATH 075 – Off-Season Conditioning Intercollegiate–Soccer (1)
KATH 076 – Off-Season Conditioning Intercollegiate–Softball (1)
KATH 077 – Off-Season Conditioning Intercollegiate–Swimming and Diving (1)
KATH 078 – Off-Season Conditioning Intercollegiate–Track and Field (1)
KATH 079 – Off-Season Conditioning Intercollegiate–Volleyball (1)
KATH 080 – Off-Season Conditioning Intercollegiate–Water Polo (1)
KATH 083 – Intercollegiate Sports–Baseball (3)
KATH 084 – Intercollegiate Sports–Basketball (1.5)
KATH 086 – Intercollegiate Sports–Football (3)
KATH 085 – Intercollegiate Sports–Cross Country (3)
KATH 089 – Intercollegiate Sports–Soccer (3)
KATH 090 – Intercollegiate Sports–Softball (3)
KATH 091 – Intercollegiate Sports–Swimming (3)
KATH 093 – Intercollegiate Sports–Track and Field (3)
KATH 094 – Intercollegiate Sports–Volleyball (3)
KATH 095 – Intercollegiate Sports–Water Polo (3)
KATH 096 – Intercollegiate Sports–Badminton (3)
KINA 003A – Beginning Swimming I (1)
KINA 003B – Advanced Beginning Swimming II (1)
KINA 003C – Intermediate Swimming (1)
KINA 003D – Advanced Swimming and Diving (1)
KINA 003E – Distance Swimming For Fitness (1)
KINT 005 – First Aid–Responding to Emergencies (3)
KINT 006 – Aquatic Certification (4)
KINA 027 – Adapted Fitness Activities (1)
KINT 027C – Early Childhood Physical Education (2)
KINA 028A – Beginning Aquatic Fitness Activities (1)
KINA 028B – Intermediate Aquatic Fitness Activities (1)
KINA 029A – Body Building (1)
KINA 029B – Intermediate Body Building (1)
KINA 029C – Advanced Body Building (1)
KINA 030 – Fitness Testing and Independent Exercise (1)
KINA 032A – Beginning Fitness Activities (1)
KINA 032B – Intermediate Fitness Activities (1)
KINA 032C – Advanced Fitness Activities (1)

KINA 033 – Stretching Fitness Activity (1)
 KINA 034A – Self Defense (1)
 KINA 034B – Intermediate Self-Defense (1)
 KINA 036 – Aerobic Fitness (1)
 KINA 037 – Police-Fire Agility Training (1)
 KINA 038 – Cardiovascular Conditioning (1)
 KINA 039A – Cycling For Fitness (1)
 KINA 039B – Beginning Cycling For Fitness–Stationary, Indoor (1)
 KINA 046A – Beginning Badminton (1)
 KINA 046B – Intermediate Badminton (1)
 KINA 046C – Advanced Badminton (1)
 KINA 048A – Beginning Fencing (1)
 KINA 048B – Intermediate Fencing (1)
 KINA 048C – Advanced Fencing (1)
 KINA 054A – Beginning Tennis (1)
 KINA 054B – Intermediate Tennis (1)
 KINA 054C – Advanced Tennis (1)
 KINA 065A – Beginning Basketball (1)
 KINA 065B – Intermediate Basketball (1)
 KINA 065C – Advanced Basketball (1)
 KINA 069 – Soccer (1)
 KINA 081A – Beginning Volleyball (1)
 KINA 081B – Intermediate Volleyball (1)
 KINA 081C – Advanced Volleyball (1)
 KINT 048 – Professional Activities–Physical Fitness (2)
 KINT 061 – Theory of Coaching (3)

Behavioral Development and Diversity (3 units minimum):

COUN 010 – Introduction to College (1)
 COUN 011 – Learning Strategies and College Skills Development (1)
 COUN 017 – Career Planning (2)
 PSYC 001 – Introductory Psychology (3)
 PSYC 005 – Research Methods in Psychology (4)
 PSYC 025 – Human Sexuality (3)
 SOC 001 – Introductory Sociology (3)
 SOC 014 – Introduction to Ethnic Studies (3)
 SOC 029 – Sociology of the African-American (3)
 SOC 031 – Chicano Sociology (3)
 SOC 041 – Sociology of the Asian American (3)

Scientific and Nutrition Background (7 units minimum):

ANAT 025 – General Human Anatomy (4)
 CHEM 001A – General Chemistry and Chemical Analysis (5)
 or CHEM 002A – Chemistry – General, Organic and Biochemistry (4)
 PYSO 001 – Human Physiology (4)
 NUTR 011 – Human Nutrition (3)

Requirements for the Associate in Arts Degree – see page 97.

Nutrition and Dietetics - Associate in Science Degree for Transfer

Top Code: 1306.00

The Associate in Science in Nutrition and Dietetics for Transfer degree (AS-T in Nutrition and Dietetics) prepares students for success in a baccalaureate degree in Nutrition and Dietetics with the lower-division coursework required to transfer into the CSU system. Students learn about chemicals and nutrients in food and their effects on the human body and the world. The study of nutritional science contributes to preparing students for careers as nutritionists, registered dietitians (RD), food scientists, or other dietetics professionals. The study of Nutrition provides a broad foundation in a practical and personally applicable exposure to a variety of scientific areas of nutrition such as chemistry, biochemistry, microbiology, anatomy, physiology, and biology. Popular topics include microbial pathogens, environmental contaminants, nutrigenomics, macronutrient balance, energy metabolism, obesity, global issues, biochemistry of exercise, and micronutrient and phytochemical utilization. Students in the program learn how the scientific method and process contributes to nutritional requirements and how nutrients function from a cellular to more practical level, and then apply this knowledge to their own health. The program also helps students understand the role of nutrition in disease prevention throughout the lifecycle and as an impact on society as a whole.

Associate Degree for Transfer Requirements

- 60 semester or 90 quarter CSU-transferable units.
- the California State University-General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.
- a minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district.
- obtainment of a minimum grade point average (GPA) of 2.0.
- earn a grade of C or better in all courses required for the major or area of emphasis.

Program Outcomes:

1. Outline the scientific method as it is used in developing hypotheses and theories, then apply the scientific method-based research, such as in peer-reviewed intervention, epidemiological, lab, and case studies, to the critical evaluation of nutrition-related literature and media, thus differentiating between proven scientific based research and myth
2. List and describe the basic chemical structures of the six classes of nutrients and the substances therein; their action, interaction, and balance in relation to health and disease.
3. Outline the process by which the human body ingests, digests, absorbs, transports, utilizes and excretes food substances.
4. Evaluate food customs of a specific culture and incorporate sources based on reliability and credibility; Assess the stigmatization, prejudice and/or discrimination experienced by individuals or groups who choose to adhere to non-Western and/or non-dominant food practices and recommend strategies to facilitate their acceptance.

Requirements for the Associate in Science Degree for Transfer (26-28 units):

REQUIRED CORE (15-20 units)

PSYC 001 – Introductory Psychology (3)

NUTR 011 – Human Nutrition (3)

MICR 002 – Microbiology (4)

CHEM 001A – General Chemistry and Chemical Analysis (5)

CHEM 001B – General Chemistry and Chemical Analysis (5)

or CHEM 001A – General Chemistry and Chemical Analysis (5)

LIST A:* Select 1-2 Courses from the following (4-9 units)

CHEM 008A – Organic Chemistry (5)

PYSO 001 – Human Physiology (4)

or ANAT 025 – Human Anatomy (4)

CHEM 001B – General Chemistry and Chemical Analysis (5)

STAT 015 – Statistics for Business and Economics (4)
 or STAT 050 – Elementary Statistics (4)
 or STAT 018 – Statistics for Behavioral and Social Sciences (4)

LIST B: Select one course from below

NUTR 012 – Principles of Food Science (3)

*LIST A:

- a. Select one course if CHEM 001A and CHEM 001B are used in the Required Core.
- b. Select two courses if CHEM 001A is used in the Required Core.

REQUIRED SUBTOTAL.....27-28
 CSU General Education or IGETC CSU Pattern..... 37-39

DEGREE TOTAL 60

Yoga Teacher Training – Associate in Science Degree, Certificate of Achievement
 Top Code: 0835.20

Yoga Teacher Training is designed to deepen students’ understanding of yoga by investigating the biomechanics of yoga postures, learning to use anatomical cueing for proper alignment in poses, examining effective teaching techniques for a variety of settings, and exploring the history and philosophy of yoga. (Program is currently under review by Yoga Alliance)

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Identify core principles of Hatha Yoga.
2. Examine skills for instructing yoga, including verbal cues, sequences, variations, adjustments, and modifications.
3. Illustrate stress management techniques with yoga poses.
4. Describe the philosophy of yoga through history, and the development of asanas.
5. Design and execute a 60 minute Yoga class.

Requirements for the Certificate of Achievement (18 units):

KINT 005 – First Aid-Responding To Emergencies (3)
 KINT 180 – Introduction to Teaching Yoga (3)
 KINT 181 – Philosophy of Yoga (3)
 KINT 182 – Anatomical Principles of Kinesiology and Fitness (3)
 NUTR 025 – Nutrition for Sport, Exercise, and Health (3)

Required Electives

KINA 040A – Beginning Yoga (1)
 KINA 040B – Intermediate Yoga (1)
 KINA 040C – Advanced Yoga (1)
 or KINT 101 – Physical Fitness Assessments (1)

Requirements for the Associate in Science Degree – see page 101.

LANGUAGES

(Languages Division)

Chinese – Associate in Arts Degree

Top Code: 1107.00

The Chinese program offers a broad spectrum of courses, ranging from language instruction to studies of civilization, culture, literature, and the arts. Language courses focus on all four skills—reading and listening comprehension, writing, and speaking. Non-language courses provide training in critical thinking while exploring cultural and literary themes in a historical context. The purpose of this major is twofold: to develop proficiency in written and spoken communication as well as to foster an understanding and appreciation of cultural diversity. The skills acquired will prepare students to pursue careers in education, journalism, business, linguistics, art, music, and international relations.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate language skills and cultural knowledge in Chinese by submission of a portfolio of completed work.

Requirements for the major in Chinese (18 units minimum)

Courses must be completed with a grade of “C” or better. Students must complete a minimum of eighteen (18) units selected from the courses listed below.

CHIN 002 – Elementary Chinese (Mandarin) (5)
CHIN 002A – Elementary Chinese (Mandarin) for Advanced Beginners (5)
CHIN 003 – Intermediate Chinese (Mandarin) (5)
CHIN 004 – Intermediate Chinese (Mandarin) (5)
CHIN 005 – Advanced Chinese Reading and Composition (3)
CHIN 010 – Chinese Civilization (3)
CHIN 012 – Chinese Literature in Translation (3)
CHIN 022 – Chinese Calligraphy (3)
CHIN 050 – Chinese Cinema (3)

Limit of one course –

CHIN 008A – Introduction to Chinese Conversation (Mandarin) (2)
or CHIN 008B – Introduction to Chinese Conversation (Mandarin) (2)

Limit of one course –

CHIN 009A – Chinese Conversation (Mandarin) (2)
or CHIN 009B – Chinese Conversation (Mandarin) (2)
or CHIN 009C – Chinese Conversation (Mandarin) (2)

Requirements for the Associate in Arts Degree – see page 97.

Foreign Language – Basic – Occupational Skills Certificate

The curriculum prepares students for reading, writing, speaking and understanding the language at a basic (high novice) level. It also provides fundamental cultural knowledge. This is an 11–13 unit Occupational Skills Certificate aligned with the national ACTFL Basic (High Novice) criteria of achievement.

<http://www.actfl.org/publications/guidelines-and-manuals/actfl-proficiency-guidelines-2012>

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Listening comprehension

Demonstrate comprehension of high-novice* level conversations in the language.

*See ACTFL high-novice guidelines

http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf

2. Reading

Demonstrate comprehension of high-novice* level texts in the language.

*See ACTFL high-novice guidelines

http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf

3. Writing

Write high-novice* level paragraphs in the language using correct grammar and appropriate vocabulary.

*See ACTFL high-novice guidelines

http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf

4. Speaking

Correctly ask and answer high-novice* level questions in the language.

*See ACTFL high-novice guidelines

http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf

5. Cultural competency

Students will demonstrate fundamental knowledge of the culture of this language.

Requirements for the Occupational Skills Certificate (12–13 units):

Chinese Option (12–13 units)

CHIN 001 – Elementary Chinese (Mandarin) (5)

CHIN 002 – Elementary Chinese (Mandarin) (5)

or CHIN 002A – Elementary Chinese (Mandarin) for Advanced Beginners (5)

CHIN 150A – Chinese for Business and Travel (2)

or CHIN 150B – Chinese for Business and Travel (2)

French Option (12–13 units)

FRNC 001 – Elementary French (5)

FRNC 002 – Elementary French (5)

FRNC 008A – French Conversation (2)

or FRNC 010 – French Civilization (3)

or FRNC 011 – Translating From French to English (2)

or FRNC 015 – Reading in French (3)

or FRNC 140 – French Pronunciation (2)

Italian Option (12–13 units)

ITAL 001 – Elementary Italian (5)

ITAL 002 – Elementary Italian (5)

ITAL 008A – Introduction to Italian Conversation (2)

- or ITAL 010 – Italian Civilization (3)
- or ITAL 012 – Introduction to Italian Literature (3)
- or ITAL 050 – Italian Film as Dramatic Literature (3)

Japanese Option (11–12 units)

- JAPN 001 – Elementary Japanese (5)
- JAPN 002 – Elementary Japanese (5)
- JAPN 011 – Inside Japan (1)
- or JAPN 008A – Introduction to Japanese Conversation (2)

Russian Option (12 units)

- RUSS 001 – Elementary Russian (5)
- RUSS 002 – Elementary Russian (5)
- RUSS 150A – Russian for Business and Travel (2)

Spanish Option (12–13 units)

- SPAN 001 – Elementary Spanish (5)
- SPAN 002 – Elementary Spanish (5)
- SPAN 008A – Introduction to Spanish Conversation (2)
- or SPAN 012 – Spanish Literature in Translation (3)

Foreign Language – Intermediate – Occupational Skills Certificate

The curriculum prepares students for reading, writing, speaking and understanding the language at an intermediate level. It also provides substantial cultural knowledge. This is a 12–14 unit Occupational Skills Certificate aligned with the national ACTFL High Intermediate criteria of achievement.

<http://www.actfl.org/publications/guidelines-and-manuals/actfl-proficiency-guidelines-2012>.

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Listening comprehension
Demonstrate comprehension of high intermediate* level conversations in the language.
*See ACTFL high-intermediate guidelines
http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf
2. Reading
Demonstrate comprehension of high-intermediate* level texts in the language.
*See ACTFL high-intermediate guidelines
http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf
3. Writing
Write high-intermediate* level paragraphs in the language using correct grammar and appropriate vocabulary.
*See ACTFL high-intermediate guidelines
http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf
4. Speaking
Converse at a high-intermediate* level in the language.
*See ACTFL high-intermediate guidelines
http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf
5. Cultural competency
Students will demonstrate substantial knowledge of the culture of this language.

Requirements for the Occupational Skills Certificate (12–14 units):

Chinese Option (12–13 units)

CHIN 003 – Intermediate Chinese (Mandarin) (5)

CHIN 004 – Intermediate Chinese (Mandarin) (5)

or z CHIN 008A – Introduction to Chinese Conversation (Mandarin) (2)

or CHIN 008B – Introduction to Chinese Conversation (Mandarin) (2)

or CHIN 010 – Chinese Civilization (3)

French Option (12–14 units)

FRNC 003 – Intermediate French (5)

FRNC 004 – Intermediate French (5)

FRNC 008B – French Conversation (2)

or FRNC 009A – French Conversation (2)

Italian Option (12 units)

ITAL 003 – Intermediate Italian (5)

ITAL 004 – Intermediate Italian (5)

ITAL 008B – Introduction to Italian Conversation B (2)

or ITAL 009A – Italian Conversation (2)

Japanese Option (12–13 units)

JAPN 003 – Intermediate Japanese (5)

JAPN 004 – Intermediate Japanese (5)

JAPN 010 – Japanese Civilization (3)

or JAPN 008B – Introduction to Japanese Conversation (2)

or JAPN 009A – Japanese Conversation (2)

Russian Option (13 units)

RUSS 003 – Intermediate Russian (5)

RUSS 004 – Intermediate Russian (5)

RUSS 011 – Russian Civilization (3)

Spanish Option (12–13 units)

SPAN 003 – Intermediate Spanish (5)

SPAN 004 – Intermediate Spanish (5)

SPAN 008B – Introduction to Spanish Conversation (2)

or SPAN 009A – Spanish Conversation (2)

or SPAN 050 – Spanish and Latin American Cinema (3)

Foreign Language – Advanced – Occupational Skills Certificate

The curriculum prepares students for reading, writing, speaking and understanding the language at an advanced level. It also provides substantial cultural knowledge.

This is a 10–12 unit Occupational Skills Certificate aligned with the national ACTFL Advanced criteria of achievement.

<http://www.actfl.org/publications/guidelines-and-manuals/actfl-proficiency-guidelines-2012>.

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Listening comprehension
Demonstrate comprehension of mid-advanced* level conversations in the language.
*See ACTFL mid-advanced guidelines
http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf
2. Reading
Demonstrate comprehension of mid-advanced* level texts in the language.
*See ACTFL mid-advanced guidelines
http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf
3. Writing
Write at a mid-advanced* level in the language.
*See ACTFL mid-advanced guidelines
http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf
4. Speaking
Converse at a mid-advanced* level in the language.
*See ACTFL mid-advanced guidelines
http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf
5. Cultural competency
Demonstrate in-depth knowledge of the culture of this language.

Requirements for the Occupational Skills Certificate (10–12 units):*Chinese Option (10–11 units)*

CHIN 005 – Advanced Chinese Reading and Composition (3)

Plus three courses from the following (10–11 units)

- CHIN 005 – Chinese Conversation (Mandarin) (2)
or CHIN 009A – Chinese Conversation (Mandarin) (2)
or CHIN 009B – Chinese Conversation (Mandarin) (2)
or CHIN 009C – Chinese Conversation (Mandarin) (2)
or CHIN 012 – Chinese Literature in Translation (3)

French Option (9–10 units)

- FRNC 006 – Introduction to the Study of French and Francophone Literature (4)
FRNC 016 – French Culture and Communication (3)

Plus one course from the following (2–3 units):

- FRNC 014 – Writing in French (3)
or FRNC 009B – French Conversation (2)

Japanese Option (10 units)

- JAPN 005 – Advanced Reading and Composition (3)
JAPN 009B – Japanese Conversation (2)
JAPN 009C – Japanese Conversation (2)
JAPN 010 – Japanese Civilization (3)

Spanish Option (10–12 units)

- SPAN 005 – Introduction to Spanish Literature (3)

Plus three courses from the following:

- SPAN 006A – Introduction to Spanish-American Literature (3)
SPAN 006B – Introduction to Spanish-American Literature (3)
SPAN 009B – Spanish Conversation (2)

SPAN 009C – Spanish Conversation (2)
SPAN 025 – Spanish Composition (3)
SPAN 042A – Civilization of Spain and Portugal (3)
SPAN 042B – Civilization of Spain and Portugal (3)
SPAN 044A – Civilization of Latin America (3)
SPAN 044B – Civilization of Latin America (3)

French – Associate in Arts Degree

Top Code: 1102.00

The French program offers a broad spectrum of courses, ranging from language instruction to studies of civilization, culture, literature, and the arts. Language courses focus on all four skills—reading and listening comprehension, writing, and speaking. Non-language courses provide training in critical thinking while exploring cultural and literary themes in a historical context. The purpose of this major is twofold: to develop proficiency in written and spoken communication as well as to foster an understanding and appreciation of cultural diversity. The skills acquired will prepare students to pursue careers in education, journalism, business, linguistics, art, music, and international relations.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate language skills and cultural knowledge in French by submission of a portfolio of completed work.

Requirements for the major in French (18 units minimum)

Courses must be completed with a grade of C or better. Students must complete a minimum of eighteen (18) units selected from the courses listed below.

Requirements for the major in French

FRNC 002 – Elementary French (5)
FRNC 003 – Intermediate French (5)
FRNC 004 – Intermediate French (5)
FRNC 005A – Survey of French Literature (3)
FRNC 005B – Survey of French Literature (3)
FRNC 006 – Introduction to the Study of French and Francophone Literature (4)
FRNC 010 – French Civilization (3)
FRNC 011 – Translating from French to English (2)
FRNC 012 – French Literature in Translation (3)
FRNC 014 – Writing in French (3)
FRNC 015 – Reading in French (3)
FRNC 016 – French Culture and Communication (3)
FRNC 050 – French Cinema (3)

Limit of one course –

FRNC 008A – French Conversation (2)
or FRNC 008B – French Conversation (2)

Limit of one course –

FRNC 009A – French Conversation (2)

or FRNC 009B – French Conversation (2)

Requirements for the Associate in Arts Degree – see page 97.**German – Associate in Arts Degree**

Top Code: 1103.00

The German program offers a broad spectrum of courses, ranging from language instruction to studies of civilization, culture, literature, and the arts. Language courses focus on all four skills—reading and listening comprehension, writing, and speaking. Non-language courses provide training in critical thinking while exploring cultural and literary themes in a historical context. The purpose of this major is twofold: to develop proficiency in written and spoken communication as well as to foster an understanding and appreciation of cultural diversity. The skills acquired will prepare students to pursue careers in education, journalism, business, linguistics, art, music, and international relations.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate language skills and cultural knowledge in German by submission of a portfolio of completed works.

**Requirements for the major in German
(18 units minimum)**

Courses must be completed with a grade of C or better. Students must complete a minimum of eighteen (18) units selected from the courses listed below.

GRMN 002 – Elementary German (5)

GRMN 003 – Intermediate German (5)

GRMN 004 – Intermediate German (5)

GRMN 005 – Introduction to German Literature (3)

GRMN 010 – German Civilization (3)

GRMN 012 – German Literature in Translation (3)

Limit of one course –

GRMN 008A – Introduction to German Conversation (2)

or GRMN 008B – Introduction to German Conversation (2)

or GRMN 008C – Introduction to German Conversation (2)

Limit of one course –

GRMN 009A – German Conversation (2)

or GRMN 009B – German Conversation (2)

or GRMN 009C – German Conversation (2)

Requirements for the Associate in Arts Degree – see page 97.

Italian – Associate in Arts Degree

Top Code: 1104.00

The Italian program offers a broad spectrum of courses, ranging from language instruction to studies of civilization, culture, literature, and the arts. Language courses focus on all four skills—reading and listening comprehension, writing, and speaking. Non-language courses provide training in critical thinking while exploring cultural and literary themes in a historical context. The purpose of this major is twofold: to develop proficiency in written and spoken communication as well as to foster an understanding and appreciation of cultural diversity. The skills acquired will prepare students to pursue careers in education, journalism, business, linguistics, art, music, and international relations.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate language skills and cultural knowledge in Italian by submission of a portfolio of completed work.

Requirements for the major in Italian (18 units minimum)

Courses must be completed with a grade of C or better. Students must complete a minimum of eighteen (18) units selected from the courses listed below.

ITAL 002 – Elementary Italian (5)
ITAL 003 – Intermediate Italian (5)
ITAL 004 – Intermediate Italian (5)
ITAL 010 – Italian Civilization (3)
ITAL 012 – Introduction to Italian Literature (3)
ITAL 050 – Italian Film as Dramatic Literature (3)

Limit of one course –

ITAL 008A – Introduction to Italian Conversation (2)
or ITAL 008B – Introduction to Italian Conversation B (2)

Limit of one course –

ITAL 009A – Italian Conversation (2)
or ITAL 009B – Italian Conversation (2)
or ITAL 009C – Italian Conversation (2)

Requirements for the Associate in Arts Degree – see page 97.

Japanese – Associate in Arts Degree

Top Code: 1108.00

The Japanese program offers a broad spectrum of courses, ranging from language instruction to studies of civilization, culture, literature, and the arts. Language courses focus on all four skills—reading and listening comprehension, writing, and speaking. Non-language courses provide training in critical thinking while exploring cultural and literary themes in a historical context. The purpose of this major is twofold: to develop proficiency in written and spoken communication as well as to foster an understanding and appreciation of cultural diversity. The skills acquired will prepare students to pursue careers in education, journalism, business, linguistics, art, music, and international relations.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate language skills and cultural knowledge in Japanese by submission of a portfolio of completed work.

**Requirements for the major in Japanese
(18 units minimum)**

Courses must be completed with a grade of C or better. Students must complete a minimum of eighteen (18) units selected from the courses listed below.

JAPN 002 – Elementary Japanese (5)
JAPN 003 – Intermediate Japanese (5)
JAPN 004 – Intermediate Japanese (5)
JAPN 005 – Advanced Reading and Composition (3)
JAPN 010 – Japanese Civilization (3)
JAPN 011 – Inside Japan (1)
JAPN 012 – Japanese Literature in Translation (3)

Limit of one course –

JAPN 008A – Introduction to Japanese Conversation (2)
or JAPN 008B – Introduction to Japanese Conversation (2)

Limit of one course –

JAPN 009A – Japanese Conversation (2)
or JAPN 009B – Japanese Conversation (2)
or JAPN 009C – Japanese Conversation (2)

Requirements for the Associate in Arts Degree – see page 97.

Russian – Associate in Arts Degree

Top Code: 1106.00

The Russian program offers a broad spectrum of courses, ranging from language instruction to studies of civilization, culture, literature, and the arts. Language courses focus on all four skills—reading and listening comprehension, writing, and speaking. Non-language courses provide training in critical thinking while exploring cultural and literary themes in a historical context. The purpose of this major is twofold: to develop proficiency in written and spoken communication as well as to foster an understanding and appreciation of cultural diversity. The skills acquired will prepare students to pursue careers in education, journalism, business, linguistics, art, music, and international relations.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate language skills and cultural knowledge in Russian by submission of a portfolio of completed work.

Requirements for the major in Russian (18 units minimum)

Courses must be completed with a grade of C or better. Students must complete a minimum of eighteen (18) units selected from the courses listed below.

RUSS 002 – Elementary Russian (5)
RUSS 003 – Intermediate Russian (5)
RUSS 004 – Intermediate Russian (5)
RUSS 011 – Russian Civilization (3)

Requirements for the Associate in Arts Degree – see page 97.

Spanish – Associate in Arts Degree Top Code: 1105.00

The Spanish program offers a broad spectrum of courses, ranging from language instruction to studies of civilization, culture, literature, and the arts. Language courses focus on all four skills—reading and listening comprehension, writing, and speaking. Non-language courses provide training in critical thinking while exploring cultural and literary themes in a historical context. The purpose of this major is twofold: to develop proficiency in written and spoken communication as well as to foster an understanding and appreciation of cultural diversity and knowledge of the rich cultural and literary tradition of Spain and Latin America. The skills acquired will prepare students to pursue careers in education, journalism, business, linguistics, art, music, and international relations.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate language skills and cultural knowledge in Spanish by submission of a portfolio of completed work.

Requirements for the major in Spanish (18 units minimum)

Courses must be completed with a grade of C or better. Students must complete a minimum of eighteen (18) units selected from the courses listed below.

SPAN 002 – Elementary Spanish (5)
SPAN 002A – Spanish for Spanish Speakers (5)
SPAN 003 – Intermediate Spanish (5)
SPAN 004 – Intermediate Spanish (5)
SPAN 005 – Introduction to Spanish Literature (3)
SPAN 006A – Introduction to Spanish-American Literature (3)
SPAN 006B – Introduction to Spanish-American Literature (3)
SPAN 012 – Spanish Literature in Translation (3)
SPAN 025 – Spanish Composition (3)
SPAN 031 – Language of the Barrio (3)
SPAN 042A – Civilization of Spain and Portugal (3)
SPAN 042B – Civilization of Spain and Portugal (3)
SPAN 044A – Civilization of Latin America (3)
SPAN 044B – Civilization of Latin America (3)
SPAN 050 – Spanish and Latin American Cinema (3)

Limit of one course

SPAN 008A – Introduction to Spanish Conversation (2)

SPAN 008B – Introduction to Spanish Conversation (2)

Limit of one course

SPAN 009A – Spanish Conversation (2)

SPAN 009B – Spanish Conversation (2)

SPAN 009C – Spanish Conversation (2)

Requirements for the Associate in Arts Degree – see page 97.

Spanish – Associate in Arts Degree for Transfer to CSU

Top Code: 1105.00

The Associate in Arts in Spanish for Transfer Degree (AA-T in Spanish) develops competence in the ability to understand, speak, read and write Spanish, and to provide an understanding and appreciation of the Spanish language and the cultures of the Spanish-speaking world. The AA-T in Spanish prepares students to continue their education at a California State University (CSU) campus leading to a baccalaureate degree in Spanish.

All courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete a minimum of 21 units.

The Associate in Arts Degree in Spanish for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional PCC graduation requirements)

Program Outcomes

1. Demonstrate proficiency in language skills in Spanish.
2. Demonstrate cultural knowledge of Latin America and Spain.

Associate in Arts Degree in Spanish for Transfer**Required courses: (20 units)**

SPAN 001 – Elementary Spanish (5)

SPAN 002 – Elementary Spanish (5)

SPAN 003 – Intermediate Spanish (5)

SPAN 004 – Intermediate Spanish (5)

LIST A: Select 1- 2 courses (3–4 units)

SPAN 005 – Introduction to Spanish Literature (3)

SPAN 006A – Introduction to Spanish-American Literature (3)

SPAN 006B – Introduction to Spanish-American Literature (3)

SPAN 008A – Introduction to Spanish Conversation (2)

SPAN 008B – Introduction to Spanish Conversation (2)

SPAN 009A – Spanish Conversation (2)

SPAN 009B – Spanish Conversation (2)

SPAN 012 – Spanish Literature in Translation (3)

SPAN 025 – Spanish Composition (3)

SPAN 042A – Civilization of Spain and Portugal (3)

SPAN 042B – Civilization of Spain and Portugal (3)
 SPAN 044A – Civilization of Latin America (3)
 SPAN 044B – Civilization of Latin America (3)
 SPAN 050 – Spanish and Latin American Cinema (3)

REQUIRED SUBTOTAL..... 19-25
 CSU General Education or IGETC CSU Pattern.....37-39
 Transferable Electives (as needed to reach 60 transferable units)

DEGREE TOTAL 60

LIBRARY

(Library Division)

Archives and Digital Collections Assistant – *Certificate of Achievement*

Top Code: 1602.00

As libraries and other types of organizations begin digitizing their local and special collection materials, this frequently means that librarians and library assistants find themselves working with archival and manuscript materials for which they have no training. Understanding how archival collections are appraised, handled, arranged, described, and preserved better prepares library staff for working with these unique materials. Similarly, libraries and other cultural heritage organizations today must ensure that digital information of long term value, both “born digital” and reformatted content, is preserved to remain accessible and usable over time. This Certificate of Achievement expands on the coursework of the Digitization Skills Certificate to include archival practices, digital image editing and digital preservation skills sets that will better prepare students for work in archives, special collections and the digitization field.

Program Outcomes:

1. Analyze the selection, technical and copyright issues that impact the success of archival and digital projects.
2. Apply established digitization protocols and standards to produce digital representations of archival materials.
3. Apply established protocols and metadata standards to provide access to digital objects in digital asset management systems.
4. Analyze methods, issues and best practices for handling, organizing, and preservation of archival collections .
5. Evaluate digital preservation strategies, methods and tools to determine what may be appropriate for particular material types, users and institutions.
6. Demonstrate proficiency in basic digital image editing, processing, and manipulation techniques.

Requirements for the Certificate of Achievement (16 units):

Required Courses

LIB 120 – Introduction to Archives & Special Collections (3)
 LIB 121 – Technologies & Processes for Digital Collections (3)
 LIB 122 – Introduction to Metadata for Digital Objects (3)
 LIB 123 – Introduction to Copyright Issues for Digital Collections (1)
 LIB 124 – Survey of Digital Preservation (2)
 PHOT 030 – Introduction to Digital Image Editing (3)
 LIB 126 – Archives & Digital Collections Internship (1)

Recommended Electives

BIT 025 – Survey of Computer Technology in Business (3)

This Certificate of Achievement is not eligible as a major for an Associate Degree.

Digitization Skills for Libraries & Cultural Heritage Institutions – *Occupational Skills Certificate*

Top Code: 1602.00

This curriculum prepares students to work in digital repositories found in libraries, archives, museums and business settings. Instruction includes: project planning, digitization, metadata, copyright and end user access to digital materials. Students will gain practical experience using industry standards in order to prepare them for entering the workforce.

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Analyze the selection, technical and copyright issues that impact the success of digital projects.
2. Apply established digitization protocols and standards to produce digital representations of archival materials.
3. Apply established protocols and metadata standards to provide access to digital objects in digital asset management systems.

Requirements for the Occupational Skills Certificate (8 units):

Recommended sequence:

- LIB 121 – Technologies & Processes for Digital Collections (3)
- LIB 122 – Introduction to Metadata for Digital Objects (3)
- LIB 123 – Introduction to Copyright Issues for Digital Collections (1)
- LIB 126 – Digitization Internship (1)

Library Technology – *Associate in Science Degree, Certificate of Achievement*

Top Code: 1602.00

The Library Technology Program prepares students for entry level Library Assistant and more specialized higher-level Library Technician positions in all types of libraries under the supervision of a librarian. Coursework includes hands-on instruction in library operations and services, including training in the use of specialized automated library systems, library service principles, and essential workplace customer service, technology, and workplace communication skills. The program highlights job-related skills and practices needed to enter and succeed in the library workplace as well as continuing education opportunities for those currently employed. PCC's Certificate of Achievement program is aligned with the American Library Association's Library Support Staff Certification (LSSC – <http://ala-apa.org/lssc/>).

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Articulate library principles, roles, and service issues related to the diverse communities libraries serve.
2. Demonstrate library workplace skills by performing various library technician job duties.
3. Demonstrate understanding of successful library service by analyzing library staff interactions with library users.

Requirements for the Certificate of Achievement (19 units):

- LIB 001 – College Research Skills (1)
- LIB 101 – Introduction to Library Services for Support Staff (3)
- LIB 102 – Introduction to Reference Services (3)
- LIB 103 – Introduction to Library Access Services (3)
- LIB 104 – Introduction to Library Technical Services (3)
- LIB 105A – Descriptive Cataloging Procedures in Online Environments (3)

Required Electives – One of the following courses

BIT 025 – Survey of Computer Technology in Business (3)
BIT 106 – Business Software–Introduction to Microsoft Office System (3)
CIS 001 – Introduction to Computers (3)
CIS 010 – Introduction to Information Systems (3)

Recommended Electives

CHDV 024C – Special Topics in Child Development – The Young Child (2)
CHDV 118 – Language and Literacy in Early Childhood (3)
CHDV 011 – Infant and Toddler Development (3)
LIB 020 – Independent Study (1)
LIB 106 – Library Technology Internship (1)
PLGL 145A – Legal Research (3)
PLGL 145B – Computer Aided Research (1)
SPCH 010 – Interpersonal Communication (3)

Requirements for the Associate in Science Degree – see page 101.

LINGUISTICS (Languages Division)

Linguistics – Associate in Arts Degree

Top Code: 1501.10

This program of study provides students with insight into the study of language and language behavior. The theoretical foundations of linguistics provide the basis for gaining insight into language structure and use. Multidisciplinary in nature, this area of emphasis includes social, psychological, and historical aspects of language. The goal of this field of study is to develop a student's capacity to observe, assess, and analyze how language operates. Students who complete this area of emphasis are prepared for advanced study in Linguistics and Foreign Languages at CSU, UC, and private universities. Employment in education, research, communication, psychology, speech pathology, cultural studies, and child development typically requires an advanced degree.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Demonstrate understanding of the systems and functions of human languages.
2. Use critical thinking skills to analyze and synthesize various aspects of human languages.

**Requirements for the area of emphasis
(18 units minimum)**

Students must complete the core course and additional requirements. All courses must be completed with a grade of C or better.

Core course (required):

LING 010 – Introduction to Linguistics (3)
or ENGL 010 – Introduction to Linguistics (3)

Students are strongly encouraged to take this course before other linguistic courses.

Additional requirements: Students must complete three courses (9 units) from the following:

ANTH 005 – Introduction to Linguistic Anthropology (3)

LING 011 – History of English Language (3)

or ENGL 011 – History of English Language (3)

LING 012 – Intercultural Communication (3)

or ENGL 012 – Intercultural Communication (3)

LING 014 – Language in Society (3)

LING 016 – Psycholinguistics: Language and the Mind (3)

LING 017 – Introduction to Language Acquisition (3)

LING 020 – Independent Study (1)

Additional Options: Students must also take either two additional courses (at least 6 units) listed above or two foreign language courses (at least 6 units) listed below. Students must take foreign language courses from the same language, if choosing a foreign language as an additional option.

American Sign Language:

ASL 001 – Elementary American Sign Language (4)

ASL 002 – Elementary American Sign Language (4)

ASL 010C – American Sign Language (3)

ASL 010D – American Sign Language (3)

Arabic:

ARBC 001 – Elementary Arabic (5)

ARBC 002 – Elementary Arabic (5)

Armenian:

ARMN 001 – Elementary Armenian (5)

ARMN 002 – Elementary Armenian (5)

Chinese:

CHIN 001 – Elementary Chinese (Mandarin) (5)

CHIN 002 – Elementary Chinese (Mandarin) (5)

CHIN 002A – Elementary Chinese (Mandarin) for Advanced Beginners (5)

CHIN 003 – Intermediate Chinese (Mandarin) (5)

CHIN 004 – Intermediate Chinese (Mandarin) (5)

French:

FRNC 001 – Elementary French (5)

FRNC 002 – Elementary French (5)

FRNC 003 – Intermediate French (5)

FRNC 004 – Intermediate French (5)

German:

GRMN 001 – Elementary German (5)

GRMN 002 – Elementary German (5)

GRMN 003 – Intermediate German (5)

GRMN 004 – Intermediate German (5)

Italian:

ITAL 001 – Elementary Italian (5)

ITAL 002 – Elementary Italian (5)

ITAL 003 – Intermediate Italian (5)

ITAL 004 – Intermediate Italian (5)

Japanese:

JAPN 001 – Elementary Japanese (5)
JAPN 002 – Elementary Japanese (5)
JAPN 003 – Intermediate Japanese (5)
JAPN 004 – Intermediate Japanese (5)
JAPN 005 – Advanced Reading and Composition (3)

Latin:

LATN 001 – Elementary Latin (5)
LATN 002 – Elementary Latin (5)

Portuguese:

PORT 001 – Elementary Portuguese–Level 1 (5)
PORT 002 – Elementary Portuguese–Level 2 (5)
PORT 003 – Intermediate Portuguese (5)
PORT 004 – Intermediate Portuguese (5)

Russian:

RUSS 001 – Elementary Russian (5)
RUSS 002 – Elementary Russian (5)
RUSS 003 – Intermediate Russian (5)
RUSS 004 – Intermediate Russian (5)

Spanish:

SPAN 001 – Elementary Spanish (5)
SPAN 002 – Elementary Spanish (5)
SPAN 002A – Spanish for Spanish Speakers (5)
SPAN 003 – Intermediate Spanish (5)
SPAN 004 – Intermediate Spanish (5)
SPAN 025 – Spanish Composition (3)
SPAN 031 – Language of the Barrio (3)

Requirements for the Associate in Arts Degree – see page 97.

MACHINE SHOP TECHNOLOGY **(Engineering & Technology Division)**

Industrial Fabricator – Occupational Skills Certificate

Top Code: 0956.30

This curriculum prepares students to seek employment as an entry-level machinist. Emphasis is on entry level skills: technical drawing, drill press, lathes, vertical milling machine operation, part set up, basic inspection and process plan development. Technical mathematics applications for industry.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Develop safety protocols for duty areas and machinery equipment.
2. Analyze inspection results to update procedures utilizing machinery equipment.
3. Develop process plans to achieve high level of accuracy from machinery equipment.

Requirements for the Occupational Skills Certificate (13 units):

MIT 101 – Introduction to Robotics (4)
MACH 101 – Beginning Metalworking Skills (3)
MACH 102 – Intermediate Metalworking Skills (3)
TECH 107A – Technical Calculations (3)

MATHEMATICS**(Math & Computer Science Division)****Mathematics – Associate in Science Degree for Transfer to CSU**

Top Code: 1701.00

The Associate in Science in Mathematics for Transfer (AS-T) prepares a student for transfer into the CSU system for further study in pure or applied mathematics. Earning a 4-year degree in mathematics prepares students for careers in which mathematical skills are in great demand, such as science, technology, engineering, computer science, business, industry, medicine, education or government.

The goal of this degree is to provide a clear pathway for transfer students applying to the California State University (CSU). Completion of the Associate in Science in Mathematics for Transfer (AS-T) ensures transfer students will complete the lower division general education requirements as well as the articulated lower division major requirements for the bachelor's degree in Mathematics prior to transferring. The Associate in Science Degree in Mathematics for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better.

Program Outcomes:

1. Develop critical thinking and problem solving skills.
2. Increase the ability to read, write, and discuss mathematics.
3. Develop an understanding of the usefulness of mathematics to other disciplines and life.

Associate in Science in Mathematics for Transfer Degree**REQUIRED COURSES (15 units)**

MATH 005A – Single Variable Calculus I (5)
MATH 005B – Single Variable Calculus II (5)
MATH 005C – Multivariable Calculus (5)

LIST A: Select 1 course from below (5 units)

MATH 010 – Linear Algebra and Applications (5)

LIST B: Select 1 course from below (4–5 units)

CS 002 – Fundamentals of Computer Science (5)
MATH 055 – Differential Equations (5)
MATH 022 – Discrete Mathematics (4)
PHYS 001A – General Physics (5)
STAT 050 – Elementary Statistics (4)

REQUIRED SUBTOTAL.....	24–25
CSU General Education or IGETC CSU Pattern.....	37–39
DEGREE TOTAL	60

MEDICAL ASSISTING (Health Sciences Division)

Medical Assisting – Administrative & Clinical – Associate in Science Degree, Certificate of Achievement

Top Code: 1208.00

The program prepares students to seek employment in medical offices or clinics performing administrative and clinical duties including records management, financial systems, laboratory procedures and medical transcription. Students must provide their own transportation to off-campus clinical sites.

The program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in coordination with the American Association of Medical Assistants. Upon successful completion of the curriculum, a student is eligible to take the certification examination to become a Certified Medical Assistant offered by the American Association of Medical Assistants (convicted felons may not be eligible).

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Requirements for admission into the Medical Assisting Program are:

1. Completed application for admission to the program.
2. Graduation from an accredited high school or equivalent with a 2.0 grade point average as well as in all college work.
3. Keyboarding speed of 30–35 wpm.
4. Eligibility for ENGL 001A.
5. After acceptance into the program, submit a completed health form evidencing physical and emotional health including required immunizations/ chest x-ray or Mantoux test.
6. Current CPR/BLS (Basic Life Support) card, which must be maintained while in the program.

Recommended preparation:

High school courses in human physiology, algebra, bookkeeping and typing.

Program Outcomes:

1. Demonstrate and perform technical skills related to administrative and clinical duties utilizing current technology and OSHA/CLIA standards required in the medical ambulatory settings.
2. Exhibit professionalism, skills required for employment and interpersonal skills in a culturally diverse community.
3. Apply cognitive skills to analyze, synthesize and evaluate ideas and information in a medical ambulatory setting.

Requirements for the Certificate of Achievement (39 units):

Recommended sequence:

Semester I

MA 109 – Health Information Technology (1)

MA 110 – Medical Office Microcomputer Management Applications (1)

MA 111A – Medical Office Procedures I (4)

MA 115 – Medical Terminology (3)
MA 122A – Clinical Assisting Techniques I (2)
MA 122B – Clinical Assisting Techniques II (2)
PYSO 100 – Basic Physiology and Anatomy (3)

Winter Intersession

MA 126 – Pharmacology for Medical Assistants (2)

Semester II

MA 111B – Medical Office Procedures II (4)
MA 113 – Human Disease (3)
MA 122C – Clinical Assisting Techniques III (4)
MA 124 – Medical Office Laboratory Procedures (3)
MA 127 – Medical Insurance (3)

Summer Intersession MA 128 – Clinical Experience (4)

Requirements for the Associate in Science Degree – see page 101.

Medical Assisting – Medical Office Administration – Associate in Science Degree, Certificate of Achievement

Top Code: 1208.20

The medical assisting administrative curriculum prepares students with entry-level skills to seek employment as administrative medical office personnel. The student will learn about the front office including medical insurance billing, bookkeeping and beginning transcription.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Requirements for the Certificate of Achievement (27 units):

MA 109 – Health Information Technology (1)
MA 110 – Medical Office Microcomputer Management Applications (1)
MA 111A – Medical Office Procedures I (4)
MA 111B – Medical Office Procedures II (4)
MA 113 – Human Disease (3)
MA 115 – Medical Terminology (3)
MA 122A – Clinical Assisting Techniques I (2)
MA 127 – Medical Insurance (3)
PSYC 024 – Lifespan Developmental Psychology (3)
PYSO 100 – Basic Physiology and Anatomy (3)

Recommended electives

MA 120 – Independent Study (1)

Requirements for the Associate in Science Degree – see page 101.

Medical Assisting – Medical Insurance Biller – *Associate in Science Degree, Certificate of Achievement*

Top Code: 1208.00

The medical insurance biller curriculum prepares students with entry-level skills to seek employment as medical office insurance billers. Instruction includes the universal claim form, state disability, private insurance billing, workers compensation, Medicare, Medi-Cal and basic coding using the CPT and ICD coding books.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Requirements for the Certificate of Achievement (22 units):

MA 109 – Health Information Technology (1)
MA 110 – Medical Office Microcomputer Management Applications (1)
MA 111A – Medical Office Procedures I (4)
MA 111B – Medical Office Procedures II (4)
MA 113 – Human Disease (3)
MA 115 – Medical Terminology (3)
MA 127 – Medical Insurance (3)
PYSO 100 – Basic Physiology and Anatomy (3)

Requirements for the Associate in Science Degree – see page 101.

MUSIC

(Performing and Communication Arts Division)

Commercial Music – *Occupational Skills Certificate*

Top Code: 1005.00

The Commercial Music Occupational Skills Certificate prepares students for employment in a variety of commercial music and music production settings such as sound designer assistant, sound editor assistant, automation dialogue replacement assistant and sound recordists. They will gain skills in applying musical skills in audio production, audio signal flow, using recording equipment, signal processing and audio editing and post-production.

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate conventional, industry-standard recording techniques including microphone selection and placement.
2. Demonstrate proficiency in multi-track recording production by recording multi-track sessions that are enhanced with the use of compiled play-lists, quantization and elastic audio.
3. Demonstrate proficiency in audio post-production by mixing a multi-track recording session so that elements of the mix are clear, and the frequency range, stereo width, and perception of depth/dynamics are all to industry standards.

Prerequisite: One of the following: MUSC 001, 004A, 040 or 041A

Requirements for the Occupational Skills Certificate (16.5 units):

MUSC 093A – Introduction to the Music Business and Entrepreneurship (2)
MUSC 096A – Introduction to Music Recording and Production (3.5)
MUSC 096B – Music Recording & Production Applications (3.5)
MUSC 096C – Music Recording & Production Workshop (3.5)

Required electives – 4 units from the following:

MUSC 034A – Jazz Keyboard Skills (2)
MUSC 034B – Advanced Jazz Keyboard Skills (2)
MUSC 036A – Pop-Jazz Theory (3)
MUSC 036B – Jazz-Commercial Theory (3)
MUSC 041A – First Year Piano (2)
MUSC 071A – Voice Techniques (1)
MUSC 083A – Beginning Guitar (1)
MUSC 105 – Popular Songwriting (3)
MUSC 112A – Electric Bass Techniques (2)
MUSC 112B – Electric Bass Repertoire (2)
MUSC 115 – Contemporary Guitar Techniques (1)
MUSC 116 – Drum Set Techniques (1)
MUSC 117 – Rhythm Section Techniques (2)
MUSC 121 – Latin Percussion Techniques (2)
MUSC 144 – Introduction to Improvisation (1)
MUSC 171A – Techniques of Popular Singing (2)
MUSC 171B – Techniques of Popular Singing (2)
MUSC 171C – Vocal Jazz Performance Techniques (1)

Music – Associate in Arts Degree

Top Code: 1004.00

A degree in the Music major from Pasadena City College enables students to develop musical proficiency in Music Theory, Musicianship, Keyboard Harmony and Performance in preparation for transfer to Bachelor of Music degree programs at the university level or for their career goals in the field of music.

Music majors are expected to declare a primary performance area (instrument or voice), undertake applied lessons on their instrument, and perform in a large ensemble.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Utilize theoretical principles in the analysis and composition of the music of the common-practice period.
2. Hear, internally, the melodic, harmonic, and rhythmic elements of the common-practice period. Display the musicianship skills necessary to participate successfully in various musical endeavors, including performance and composition.
3. Present successful solo performances using appropriate repertoire for their chosen instrument/voice with technical proficiency, musicality and stylistic awareness.
4. Perform and/or participate successfully in small and large ensembles, using time management and interpersonal skills to assist in the production of a collaborative musical work.
5. Using standard music references and resources (reference works, periodicals, software, etc.), write analytical, historical, critical, biographical, and research oriented projects on topics in music.

Requirements for the major (38 units minimum)

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete all of the following courses:

MUSC 001A – Music Theory I (3)
MUSC 001B – Music Theory II (3)
MUSC 001C – Music Theory III (3)
MUSC 001D – Music Theory IV (3)
MUSC 002A – Musicianship I (1)
MUSC 002B – Musicianship II (1)
MUSC 002C – Musicianship III (1)
MUSC 002D – Musicianship IV (1)
MUSC 004A – Keyboard Skills I (1)
MUSC 004B – Keyboard Skills II (1)
MUSC 004C – Keyboard Skills III (1)
MUSC 004D – Keyboard Skills IV (1)
MUSC 007A – Music History and Literature (3)
MUSC 007B – Music History and Literature (3)
MUSC 010 – Concert Music (0.5)*
*(MUSC 010 must be completed 4 times)

Select four units from the following options:

MUSC 009A – Individual Instruction I (1)
MUSC 009B – Individual Instruction II (Classical) (1)
or MUSC 009D – Individual Instruction II (Jazz/Commercial) (1)

Students must complete two units from the following:

MUSC 009C – Individual Instruction III (Classical) (1)
or MUSC 009E – Individual Instruction III (Jazz/Commercial) (1)

Students must complete four additional units from the following courses:

MUSC 043 – Piano Ensemble (1)
MUSC 044 – Piano Accompanying (1)
MUSC 056 – Vocal Jazz Ensemble (1)
MUSC 057A – Jazz Combo (1)
MUSC 057B – Lancer Jazz Big Band (1)
MUSC 057C – Studio Jazz Ensemble (1)
MUSC 057D – Swing Band (1)
MUSC 057E – Jazz Guitar Ensemble (1)
MUSC 057F – Latin Jazz Ensemble (1)
MUSC 057G – Dixieland/Swing Combo (1)
MUSC 059 – Chamber Orchestra (1)
MUSC 060 – College/Community Orchestra (1)
MUSC 061 – Lancer Marching Band (2)
MUSC 062 – Lancer Concert Band (2)
MUSC 063 – Concert Choir (1)
MUSC 064 – Chamber Singers (1)
MUSC 065 – College/Community Concert Band (1)
MUSC 066 – Madrigals (1)
MUSC 074 – Opera Workshop (2)
MUSC 075 – Musical Theater Workshop (2)
MUSC 082 – Guitar Ensemble (1)

Requirements for the Associate in Arts Degree – see page 97.

Music – Associate in Arts Degree for Transfer to CSU

Top Code: 1004.00

The Associate in Arts for Transfer in Music (AA-T in Music degree) prepares students to transfer to a Bachelor of Arts degree program, a capstone or terminal liberal arts degree with an emphasis on music. Students develop musical proficiency in theory, musicianship and performance on their primary instrument or voice.

Students who plan to pursue a professional career in music (in performance, composition, jazz, music technology, education or graduate study) should pursue the Associate of Arts in Music (AA in Music degree) which prepares students to transfer to a Bachelor of Music degree program. Students develop musical proficiency in theory, musicianship, keyboard harmony and music history while preparing to successfully audition on their primary instrument or voice for acceptance into a university music department.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific institutions.

Requirements for the Major

All courses must be completed with a grade of C or better. All courses must be numbered 1–99. Students must complete a minimum of 22 units, as set forth below.

The Associate in Arts Degree in Music for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of “C” or better. (Students completing this degree are not required to fulfill additional PCC graduation requirements)

Pasadena City College may certify a maximum of 39 units as having fulfilled the CSU lower division general education requirements.

Program Outcomes:

1. Utilize theoretical principles in the analysis and composition of the music of the common-practice period.
2. Hear, internally, the melodic, harmonic, and rhythmic elements of the common-practice period. Display the musicianship skills necessary to participate successfully in various musical endeavors, including performance and composition.
3. Present successful solo performances using appropriate repertoire for their chosen instrument/voice with technical proficiency, musicality and stylistic awareness.
4. Perform and/or participate successfully in small and large ensembles, using time management and interpersonal skills to assist in the production of a collaborative musical work.

Associate in Arts Degree in Music for Transfer

REQUIRED CORE (21–22 units)

MUSC 001A – Music Theory I (3)
MUSC 001B – Music Theory II (3)
MUSC 001C – Music Theory III (3)
MUSC 001D – Music Theory IV (3)
MUSC 002A – Musicianship I (1)
MUSC 002B – Musicianship II (1)
MUSC 002C – Musicianship III (1)
MUSC 002D – Musicianship IV (1)

Applied Music (2 units)

- MUSC 009A – Individual Instruction I (1)
- MUSC 009B – Individual Instruction II Classical (1)
- MUSC 009C – Individual Instruction II Jazz/Commercial (1)
- MUSC 009D – Individual Instruction III Classical (1)
- MUSC 009E – Individual Instruction III Jazz/Commercial (1)

Large Ensemble (4 semesters)

- MUSC 043 – Piano Ensemble (1)
- MUSC 056 – Vocal Jazz Ensemble (1)
- MUSC 057A – Jazz Combo (1)
- MUSC 057B – Lancer Jazz Big Band (1)
- MUSC 057C – Studio Jazz Ensemble (1)
- MUSC 057D – Swing Band (1)
- MUSC 057E – Jazz Guitar Ensemble (1)
- MUSC 057F – Latin Jazz Ensemble (1)
- MUSC 060 – College/Community Orchestra (1)
- MUSC 061 – Lancer Marching Band (2)
- MUSC 062 – Lancer Concert Band (2)
- MUSC 063 – Concert Choir (1)
- MUSC 064 – Chamber Singers (1)
- MUSC 065 – College/Community Concert Band (1)
- MUSC 066 – Madrigals (1)
- MUSC 074 – Opera Workshop (1)
- MUSC 075 – Musical Theatre Workshop (1)
- MUSC 082 – Guitar Ensemble (1)

REQUIRED SUBTOTAL.....	22
CSU General Education or IGETC CSU Pattern.....	37-39
DEGREE TOTAL	60

Music – Certificate of Achievement

TOP Code: 1004.00

The Certificate of Achievement in Music curriculum provides students with a broad foundation in music that will enable them to pursue a variety of musical paths including performance, composition, and music education. Students will develop performance skills through applied lessons and participation in ensembles, combined with a two-year sequence of music theory, aural skills/sight-reading, and keyboard proficiency courses. Students who complete the curriculum can seek entry-level employment as music educators, performers, music assistants, and musical leaders in liturgical/worship services. Prior to beginning the coursework in this program, students should have at least some experience in reading printed music and playing an instrument/voice.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Utilize theoretical principles in the analysis and composition of music from various periods and styles.
2. Demonstrate an advanced aural awareness of the melodic, harmonic, and rhythmic elements of tonal music. Display the musicianship skills necessary to participate successfully in various musical endeavors, including performance and composition.

3. Present successful solo performances using appropriate repertoire for their chosen instrument/voice with technical proficiency, musicality and stylistic awareness.
4. Perform and/or participate successfully in small and large ensembles, using time management, interpersonal skills, and musicality to assist in the production of a collaborative musical work.

Requirements for the Certificate of Achievement (30 units):

MUSC 001A – Music Theory I (3)
 MUSC 001B – Music Theory II (3)
 MUSC 001C – Music Theory III (3)
 MUSC 001DC – Music Theory IV (3)
 MUSC 002A – Musicianship I (1)
 MUSC 002B – Musicianship II (1)
 MUSC 002C – Musicianship III (1)
 MUSC 002D – Musicianship IV (1)
 MUSC 004A – Keyboard Skills I (1)
 MUSC 004B – Keyboard Skills II (1)
 MUSC 004C – Keyboard Skills III (1)
 MUSC 004D – Keyboard Skills IV (1)
 MUSC 010 – Concert Music (.50)*
 *(MUSC 010 must be completed 4 times)

Applied Instruction I and II: Take 2 units from the following options

MUSC 009A – Individual Instruction I (1)
 MUSC 009B – Individual Instruction II (Classical) (1)
 or MUSC 009D – Individual Instruction II (Jazz/Commercial) (1)

Applied Instruction III: Take 2 units from the following options

MUSC 009C – Individual Instruction III (Classical) (1)
 or MUSC 009E – Individual Instruction III (Jazz/Commercial) (1)

Ensembles: Choose 4 units from the following options

MUSC 043 – Piano Ensemble (1)
 MUSC 044 – Piano Accompanying (1)
 MUSC 056 – Vocal Jazz Ensemble (1)
 MUSC 057A – Jazz Combo (1)
 MUSC 057B – Lancer Jazz Big Band (1)
 MUSC 057C – Studio Jazz Ensemble (1)
 MUSC 057D – Swing Band (1)
 MUSC 057E – Jazz Guitar Ensemble (1)
 MUSC 057F – Latin Jazz Ensemble (1)
 MUSC 057I – Vocal Jazz Combo (1)
 MUSC 060 – College/Community Orchestra (1)
 MUSC 061 – Lancer Marching Band (2)
 MUSC 062 – Lancer Concert Band (2)
 MUSC 063 – Concert Choir (1)
 MUSC 064 – Chamber Singers (1)
 MUSC 074 – Opera Workshop (2)
 MUSC 075 – Musical Theater Workshop (2)
 MUSC 076 – Opera Production (2)
 MUSC 082 – Guitar Ensemble (1)

Music Entrepreneurship – Associate in Science Degree, Certificate of Achievement

Top Code: 1005.00

The Music Entrepreneurship Certificate at PCC is designed to embolden music students towards successful and sustainable careers in a rapidly changing artistic and business climate. In this program, students gain a portfolio of practical business-oriented skills as well as skills critical to the current musician like audio and video editing, effective music notation, concert or recital planning and the management of teaching studios. The program also develops entrepreneurial, creative, and collaborative skills, and can be completed on its own or in conjunction with a traditional music degree.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Accurately describe current and emerging trends in the music industry, including new and emerging career trajectories.
2. Exhibit flexibility with, and creative use, of audio, visual, musical and internet technology for use in the creation and promotion of their professional output.
3. Develop effective business correspondence, such as business plans, marketing materials, and the like.
4. Demonstrate an understanding of personal financial skills and the essential business skills required for a career in the music industry.
5. Create a portfolio-level project, such as a recital, recording project, music video or business plan, that demonstrates skills in project planning, business, music, technology and entrepreneurship.

Requirements for the Certificate of Achievement (33-35 units):

Required Core

MUSC 001A – Music Theory I (3)
MUSC 002A – Musicianship I (1)
MUSC 094 – Intro to Music Technology for Musicians (3)
MUSC 093A – Introduction to the Music Business and Entrepreneurship (2)
MUSC 099 – Music Entrepreneurship Practicum (2)

Additional Requirements – 4-6 units

MUSC 001B – Music Theory II (3)
MUSC 002B – Musicianship II (1)
or MUSC 036A – Pop-Jazz Theory (3)
or MUSC 093B – The Music Business (2)

Required Electives (Minimum 18 Units)

ART 098 (DMA 050) – Web Design and Development (3)
BUS 002 – Personal Finance (3)
BUS 116 – Entrepreneurship (3)
EDUC 030 – Teaching as a Profession (3)
MRKT 150 – Social Media Marketing For Business (3)
MUSC 004A – Keyboard Skills I (1)
MUSC 012 – Introduction to Music Composition (3)
MUSC 030 – Music for Early Childhood Education (3)
MUSC 032 – Introduction to Music Education (2)
MUSC 034A – Jazz Keyboard Skills (2)
MUSC 035 – Music Preparation and Music Copying (2)
MUSC 036A – Pop-Jazz Theory (3)
MUSC 036B – Jazz-Commercial Theory (3)

MUSC 093B – The Music Business (2)
MUSC 096A – Introduction to Music Recording and Production (3.5)
MUSC 096B – Music Recording and Production Applications (3.5)
MUSC 096C – Music Recording & Production Workshop (3.5)
MUSC 171B – Intermediate Techniques of Popular Singing (2)
MUSC 116 – Drum Set Techniques (2)
MUSC 117 – Rhythm Section Techniques (2)
MUSC 129A – Music in Multimedia (3)
TVR 004 – Beginning Single Camera Production (3)

Requirements for the Associate in Science Degree – see page 101.

NATURAL SCIENCES

(Natural Sciences Division)

Natural Sciences – Associate in Arts Degree

Top Code: 4902.00

This area of emphasis offers a broad and interdisciplinary foundation in the sciences necessary for continued training at the upper division (or advanced) level for many bachelor degree programs in the natural sciences including biology, chemistry, geology, mathematics, physics, and many others. It is a starting point for students who are preparing for careers in business, industry, medicine, health sciences, education, and government, where scientific and technical skills are in great demand.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Program Outcomes:

1. Successfully apply the scientific method to solve problems and act as a responsible global citizen.
2. Synthesize the major paradigms in 3 of the 5 disciplines in the Natural Sciences Division.
3. Demonstrate adequate preparation for advanced study in one focal discipline within the Natural Sciences Division.

Requirements for the area of emphasis **(18 units minimum)**

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete 18 units with at least 3 units in three of the following six categories listed below:

Biological Sciences

ANTH 001 – Physical Anthropology (3)
 or ANTH 001H – Honors Physical Anthropology (3)
ANTH 001L – Laboratory in Physical Anthropology (1)
ANAT 025 – General Human Anatomy (4)
BIOL 002 – Animal Biology (4)
BIOL 003 – Human Biology (4)
BIOL 004 – Plant Biology (4)
BIOL 005A – Topics in Applied Botany/Urban Tree Identification & Biology (1)
BIOL 005B – Topics in Applied Botany: Botany for School Gardens (1)
BIOL 010A – Cellular Biology, Genetics and Evolution (5)
BIOL 010B – The Diversity of Life on Earth: Structure, Function and Ecology (5)

BIOL 010C – Genetics (3)
BIOL 011 – General Biology (4)
 or BIOL 011H – Honors General Biology (4)
BIOL 014 – Field Biology (4)
BIOL 016 – Marine Biology (4)
BIOL 025 – Field Studies (1)
BIOL 026 – Biology Field Studies (2)
BIOL 028 – Introduction to Bioinformatics (3)
BIOL 038 – Cell and Molecular Biology (4)
BIOL 039 – Modern Human Genetics (4)
MICR 002 – Microbiology (4)
NUTR 011 – Human Nutrition (3)
PYSO 001 – Human Physiology (4)
PSYC 002 – Elementary Physiological Psychology (3)

Chemistry

CHEM 001A– General Chemistry and Chemical Analysis (5)
CHEM 001B – General Chemistry and Chemical Analysis (5)
CHEM 002A – Chemistry–General, Organic and Biochemistry (4)
CHEM 002B – Chemistry–General, Organic and Biochemistry (4)
CHEM 008A – Organic Chemistry (5)
CHEM 008B – Organic Chemistry (5)
CHEM 022 – Introductory Chemistry (4)

Environmental Sciences

ENVS 001 – Introduction to Environmental Science (4)
ENVS 002 – Human Impact on the Environment (3)
ENVS 003 – Chemistry and the Environment (4)
ENVS 030 – Environmental Field Investigations (2)
ENVS 040 – Environmental Field Laboratory (1)

Geosciences

GEOG 001 – Physical Geography (3)
GEOG 001L – Physical Geography Laboratory (1)
GEOG 004 – Weather and Climate (3)
GEOL 001 – Physical Geology (4)
GEOL 001F – Physical Geology Field Studies (1)
GEOL 002 – Historical Geology (4)
GEOL 002F – Historical Geology Field Studies (1)
GEOL 003 – Earth and Space Science (4)
GEOL 003F – Earth and Space Science Field Laboratory (1)
GEOL 004 – Geology of California (3)
GEOL 006 – Mineralogy (4)
GEOL 012 – Physical Oceanography (3)
GEOL 012F – Physical Oceanography Field Studies (1)
GEOL 012L– Physical Oceanography Laboratory (1)
GEOL 016 – Introduction to Planetary Science (3)
GEOL 022 – The Age of Dinosaurs (3)
GEOL 023 – Natural Disasters (3)
GEOL 024 – Science of Atmosphere (3)
GEOL 030 – Geological Field Investigation (2)
GEOL 030A – Channel Islands–Coastal California (2)
GEOL 030C – Coast Ranges–San Andreas Fault (2)
GEOL 030D – Sierra Nevada (2)

GEOL 030E – Owens Valley–Death Valley (2)
GEOL 030F – Geological Field Investigation–Rocky Mountains (2)
GEOL 030G – Klamath Mountains–Northern California (2)
GEOL 030H – International Study Areas (2)
GEOL 030I – Problems in Structural Geology (2)
GEOL 030J – Colorado Plateau (2)
GEOL 030K – Problems in Regional Stratigraphy (2)
GEOL 030L – Applications of Global Positional System (2)
GEOL 030M – Geological Field Investigation–Pacific Rim /Pacific Islands (2)
GEOL 040 – Geological Field Laboratory (1)

Mathematics & Statistics

MATH 003 – College Algebra (4)
MATH 005A – Single Variable Calculus I (5)
MATH 005AH – Honors Single Variable Calculus I (5)
MATH 005B – Single Variable Calculus II (5)
MATH 005BH – Honors Single Variable Calculus II (5)
MATH 005C – Multivariable Calculus (5)
MATH 005CH – Honors Multivariable Calculus (5)
MATH 007A – Mathematical Analysis 1 (4)
MATH 007B – Mathematical Analysis 2 (4)
MATH 008 – Trigonometry (4)
MATH 009 – Precalculus Mathematics (5)
MATH 010 – Linear Algebra and Applications (5)
MATH 022 – Discrete Mathematics (4)
MATH 055 – Differential Equations (5)
STAT 050 – Elementary Statistics (4)
STAT 050H – Honors Elementary Statistics (4)

Physics & Physical Sciences

ASTR 001 – Elementary Astronomy (4)
ASTR 012 – Descriptive Introduction to Astronomy (3)
PHSC 003 – Physical Sciences (3)
PHSC 003L – Laboratory for Physical Science (1)
PHYS 001A – General Physics (5)
PHYS 001B – General Physics (5)
PHYS 001C – General Physics (5)
PHYS 001D – General Physics (5)
PHYS 002A – General Physics (4)
PHYS 002B – General Physics (4)
PHYS 010 – Descriptive Introduction to Physics (3)
PHYS 010L – Descriptive Physics in the Laboratory (1)
PHYS 031A – General Physics (5)
PHYS 031B – General Physics (5)

Requirements for the Associate in Arts Degree – see page 97.

NURSING

(Health Sciences Division)

Certified Nursing Assistant – Occupational Skills Certificate

Top Code: 1230.30

The Certified Nursing Assistant course provides the student with the necessary skills to seek employment in long-term care facilities as Certified Nursing Assistants. Emphasis is on basic principles of nursing, development and application of nursing skills in long-term care facilities.

Upon completion of the Certified Nursing Assistant course the student will receive a Certificate of Course Completion and is eligible to take the State of California Department of Health Services written and practical examination to obtain a certificate as a Certified Nursing Assistant.

A grade of C or better must be achieved to receive the Occupational Skills Certificate.

Selection of Students:

CANDIDATES MUST SUBMIT WRITTEN APPLICATION IN THE NURSING DIVISION AND WILL BE SELECTED AND PRIORITIZED IN THE FOLLOWING ORDER:

1. Students who have been accepted into the Vocational Nursing program.
2. Students accepted into Registered Nursing program (Fall semester).
3. Vocational Nursing program applicants who have not been admitted into the program.
4. Applicants for CNA only.

Prerequisites:

Completion of 10th grade in high school
Minimum age of 16
Valid AHA CPR/Basic Life Support Card Course for health care providers

Certified Nursing Assistant Curriculum

Required course for the Occupational Skills Certificate (5 units)

NURS 103 – Nursing Assistant (5)

NURSING PROGRAMS

I. General admissions requirements for the Registered Nursing and Vocational Nursing Programs:

1. The student must formally apply to the College and is encouraged to make an appointment to see a counselor before enrolling in nursing prerequisite courses.
2. The student must be a United States high school graduate or have a G.E.D. or equivalent.
3. The student must have and maintain a current American Heart Association AHA CPR/Basic Life Support Card for health care providers and Nursing Malpractice Insurance while in a nursing program.
4. Students who have completed previous college nursing coursework and are requesting advanced placement must provide transcripts, a copy of course syllabi and/or catalog descriptions and a letter of clinical safety signed by previous Nursing Division Dean/Director. A petition for advanced placement must be filed in Student Services. If the petition is approved, an examination in theory and lab skills may be administered. A grade of C or better must be achieved on this examination.

II. Other Requirements

1. Admission to and continuation in a nursing program requires the student to maintain a grade of C or better in all required nursing courses (prerequisites, requisites, and corequisites) and a GPA of 2.5 in prerequisites.
2. Once accepted into a nursing program, the student is required to submit evidence of health documented by a recent physical examination (within the last year), with the required immunizations and/or titres.
3. Students are expected to comply with the division's clinical uniform standards.
4. Students must provide their own transportation to all on- and off-campus clinical sites. Assignments are scheduled between the hours of 6:30 a.m. and 11:30 p.m. daily, including Sat and Sun.
5. Each theory course has two corequisites, a seminar course and a laboratory course both of which must be taken concurrently with the theory course.
6. Nursing students must have the ability to communicate safely and effectively in a health care setting. To enhance success in a nursing program, students who have English as a second language are encouraged to enroll in SPCH 003, 010, and MA 115.
7. The California Board of Registered Nursing and the California Board of Vocational Nurses and Psychiatric Technician Examiners are required to protect the public by screening applicants for licensure to identify potentially unsafe practitioners. The law provides for denial of licensure for crimes or acts which are related to nursing qualifications, functions and/or duties. Program applicants who have questions related to eligibility for licensure may contact the Health Sciences Division for referral to the appropriate licensing board.

III. Selection of Students:

ALL ELIGIBLE APPLICANTS WHO MEET THE ABOVE REQUIREMENTS AND COURSE PREREQUISITES WILL BE SELECTED ACCORDING TO THE FOLLOWING CRITERIA:

BASIC RN PROGRAM

1. Prerequisites completed as described above.
2. Students who were previously admitted to the program and are eligible for readmission.

VOCATIONAL NURSING

1. New applicants to the VN program.
2. Students who withdrew from the VN program a year ago and are eligible for readmission.
3. Prerequisites completed as described above.

CAREER LADDER – LVN TO REGISTERED NURSING

1. Prerequisites completed as described above and valid California Licensed Vocational Nursing License.
2. Students who were previously admitted to the program and are eligible for readmission.

The Division of Health Sciences will inform RN, LVN to RN, LVN and approved CNA candidates of the results by mail approximately six to eight weeks after the application deadline.

Program Outcomes:

The PCC Nursing Program's outcomes reflect standards of competency as delineated by the California State Boards of Nursing and the Department of Health Services. SLOs are synthesized in all courses as noted:

1. Apply theoretical knowledge and concepts of nursing roles through foundations of nursing care, beginning nursing care, intermediate care, and advanced nursing care, ending with the program outcomes of advocate, clinician, critical thinker, leader and teacher. (NURS 050/050L, 051/051L, 052/052L, 053/053L, 125/125L, 126/126L, 127/127L)
2. Communicate theoretical knowledge and concepts of nursing roles through foundations of nursing care, beginning nursing care, intermediate care, and advanced nursing care, ending with the program outcomes of advocate, clinician, critical thinker, leader and teacher. (All NURS courses)
3. Demonstrate safe and effective basic procedural skills with emphasis on elderly patients. (NURS 103)

Nursing – Registered Nursing – Associate in Science Degree, Certificate of Achievement

Top Code: 1230.10

The Registered Nursing Program is accredited by the California Board of Registered Nursing: BRN, 400 R Street, Suite 4030, Sacramento, CA, 95814–6200, (916) 322–3350.

The Registered Nursing Program is accredited by the California Board of Registered Nursing. The Registered Nursing Program curriculum provides students the opportunity to seek licensure as an RN and employment in a variety of health care settings. Emphasis is placed on nursing theory and concepts to promote, maintain, and restore health in individuals with common and complex health problems throughout the life span. Additionally, the development and application of the nursing knowledge, skills, and attitudes needed to use the nursing process in the care of individuals is emphasized. Upon completion of the Registered Nursing curriculum, the student receives a Certificate of Achievement, an Associate Degree of Science, and is eligible to apply to take the National Council Licensing Examination Registered Nursing (NCLEX-RN) exam and if successful will qualify to receive a license from the Board of Registered Nursing to practice nursing in the State of California.

Required Courses

Prerequisites:

ENGL 001A or 001AH or 001AS
MICR 002
ANAT 025
PYSO 001
MATH 402 **or** higher
Valid AHA CPR/Basic Life Support Card Course for health care providers

Required Non-nursing Courses:

NUTR 011
PSYC 024
SPCH 010 (preferred)
or SPCH 001
SOC 001

The Human Nutrition, Psychology across the Lifespan, Speech, and Sociology are required by the Board of Registered Nursing even when the student holds previous academic degrees.

English, Humanities, Political Science and U.S. History or American Institutions 125, PE, Critical Thinking (See Associate in Science Degree requirements.)

It is recommended that the student complete as many of these non-nursing classes as possible prior to beginning the program.

Program Outcomes:

1. Deliver **patient-centered care** that recognizes the patient or designee as the source of control and full partner in providing compassionate and coordinated nursing care based on respect for patient's preferences and values and needs.
2. Use **teamwork and collaboration** to function effectively within nursing and inter-professional teams, fostering open communication, mutual respect and shared decision-making to achieve quality patient care.
3. Develop an **evidence-based practice** by integrating best current evidence with clinical nursing expertise and patient/family preferences and values for delivery of optimal health care.
4. Improve **safety** by minimizing risk of harm to patients and providers through individual nursing performance and **quality improvement** system methods to continuously improve the quality of health care systems.
5. Use **informatics**, including information and technology, to communicate, manage knowledge, mitigate error, and support nursing decision making.

6. Adhere to standards of professional nursing practice by being responsible for personal actions and behaviors and practicing nursing within legal, ethical, and regulatory standards.

Registered Nursing Curriculum

THE FOLLOWING SEQUENCE MUST BE FOLLOWED:

These courses must be completed prior to taking the NCLEX-RN and licensure as required by the State of California Board of Registered Nursing:

Requirements for the Certificate of Achievement (39 units):

Sequence to be followed:

Semester I

NURS 050 – Foundational Nursing Care (3)
NURS 050L – Foundational Nursing Care Lab/Clinical (5)
NURS 050S – Foundational Nursing–Seminar (1)
NURS 137 – Pharmacology: Drugs and Solutions (1)
NURS 138 – Pharmacology: Process and Problems (1)

Semester II

NURS 040 – Maternal Newborn Nursing (1)
NURS 040L – Maternal Newborn Nursing Lab (2)
NURS 041 – Pediatric Nursing (1)
NURS 041L – Pediatric Nursing Lab (2)
NURS 051A – Beginning Medical Surgical Nursing (1)
NURS 051L – Beginning Medical Surgical Nursing Lab (2)
NURS 051S – Beginning Nursing–Seminar (1)

Semester III

NURS 042 – Psychiatric Mental Health Nursing (1)
NURS 042L – Psychiatric Mental Health Nursing Lab (1.5)
NURS 052A – Intermediate Medical Surgical Nursing (2)
NURS 052L – Intermediate Medical Surgical Nursing Lab (3.5)
NURS 052S – Intermediate Nursing Care–Seminar (1)

Semester IV

NURS 053L – Advanced Medical-Surgical Nursing–Clinical (5)
NURS 053S – Advanced Nursing Seminar (1)
NURS 053 – Advanced Medical-Surgical Nursing (3)

Recommended electives

CHEM 002A – Chemistry–General, Organic and Biochemistry (4)
GERO 001 – Introduction to Gerontology (3)
GERO 022 – Directed Studies in Gerontology (3)
GERO 140 – Applied Health Care Management in Gerontology (3)
MA 115 – Medical Terminology (3)
NURS 103 – Nursing Assistant (5)
NURS 139 – Intermediate Clinical Pharmacology (2)
NURS 201 – Basic Strategies for Success in Nursing Education (1)
NURS 202 – Basic Clinical Skills (3)
NURS 211 – Basic Cardiac Dysrhythmias (1)
NURS 213 – Intravenous Therapy and Blood Withdrawal (1)

Requirements for the Associate in Science Degree – see page 101.

Nursing – Vocational Nursing – Associate in Science Degree, Certificate of Achievement

Top Code: 1230.20

I. General admissions requirements for the Vocational Nursing Programs:

1. The student must formally apply to the college and is encouraged to make an appointment to see a counselor before enrolling in nursing prerequisite courses
2. The student must be a United States high school graduate or have a G.E.D. or equivalent.
3. The student must have and maintain a current AHA CPR/Basic Life Support Card, for health care provider.
4. Students who have completed previous college nursing course work and are requesting advanced placement must provide transcripts and submit a petition to the college for advanced placement. If the petition is approved, an examination in theory and lab skills may be administered. A grade of C or better must be achieved on this examination.

II. Other Requirements

1. Admission to and continuation in a nursing program requires the student to maintain a grade of C or better in all required nursing courses (prerequisites, requisites, and corequisites) and GPA of 2.5 in prerequisites.
2. Once accepted into a nursing program, the student is required to submit evidence of good health documented by a recent physical examination (within the last year), with the required immunizations.
3. Students must provide their own transportation to all on- and off-campus clinical sites. Assignments are scheduled between the hours of 6:30 a.m. and 11:30 p.m., daily.
4. Each theory course has a laboratory course that must be taken concurrently.
5. Nursing students must have the ability to communicate effectively. To enhance success in a nursing program, students who have English as a second or third language are encouraged to enroll in Speech 003, 010 and Medical Assisting 115.
6. The California Board of Vocational Nurses and Psychiatric Technician Examiners are required to protect the public by screening applicants for licensure to identify potentially unsafe practitioners. The law provides for denial of licensure for crimes or acts which are related to nursing qualifications, functions and/or duties. Program applicants who have questions related to eligibility for licensure may contact the Health Sciences Division for referral to the appropriate licensing board.

III. Selection of Students:

ALL ELIGIBLE APPLICANTS WHO MEET THE ABOVE REQUIREMENTS AND COURSE PREREQUISITES WILL BE SELECTED ACCORDING TO THE FOLLOWING CRITERIA:

VOCATIONAL NURSING

1. New applicants to the VN program.
2. Students who withdrew from the VN program a year ago and are eligible for readmission.
3. Prerequisites completed as described above.

The Vocational Nursing curriculum provides students with skills that will afford them the opportunity to seek employment in hospitals, clinics, private physicians' offices, and skilled nursing in extended and long-term care facilities.

Emphasis is on nursing theory, development and application of nursing skills in the basic care of individuals throughout the life span.

Upon completion of this curriculum the student will receive a Certificate of Achievement and will be eligible to take the National Council Licensing Examination-Vocational Nurse (NCLEX-VN) and if successful will qualify to receive a license from the Board of Vocational Nurse and Psychiatric Technician Examiners regulations to practice in the State of California.

A grade of C or better in all Vocational Nursing course work is required to meet the California Board of Vocational Nurse and Psychiatric Technician Examiners regulations.

NOTE: The following sequence must be followed.

Vocational Nursing Curriculum

Requirements for the Certificate of Achievement (56 units – includes prerequisites):

Sequence must be followed:

Prerequisites

NURS 103

PYSO 100

MATH 400 A and B, or 402, or higher

NUTR 011

PSYC 024-

The PCC Nursing Program's outcomes reflect standards of competency as delineated by the California State Boards of Nursing and the Department of Health Services.

Required Nursing Classes (37 units)

Semester I

NURS 108A – Nursing Skills Laboratory–VN (1)

NURS 122 – Medication Administration for Vocational Nurses–Theory (3)

NURS 125 – Fundamentals of Vocational Nursing–Theory (5)

NURS 125L – Fundamentals of Vocational Nursing–Clinical (5)

Semester II

NURS 108B – Nursing Skills Laboratory–VN (1)

NURS 124 – Mental Health Nursing for Vocational Nurses (2)

NURS 126 – Intermediate Vocational Nursing – Theory (5)

NURS 126L – Intermediate Vocational Nursing–Clinical (5)

Semester III

NURS 127 – Advanced Vocational Nursing–Theory (6)

NURS 127L – Advanced Vocational Nursing–Clinical (4)

Program Outcomes:

1. Utilize the nursing process in health promotion, restoration, and disease and illness prevention.
2. Apply evidence based practice in providing therapeutic nursing interventions for clients and families.
3. Apply Quality Safety Education for Nursing (QSEN) knowledge, skills, and attitudes (ksa) to client care.
4. Apply clinical reasoning skills to client care.
5. Provide health education to individuals, families and communities
6. Demonstrate competency in vocational nursing procedural skills.
7. Advocate for clients and families.
8. Provide culturally sensitive nursing care.

Requirements for the Associate in Science Degree – see page 101.

Licensed Vocational Nurse to Registered Nurse – Associate in Science Degree, Certificate of Achievement

Top Code: 1230.10

The Licensed Vocational Nurse to Registered Nurse Associate of Science curriculum provides the student with the theory and skills to seek employment in hospitals, clinics, private physician offices, and skilled nursing in extended and long-term care facilities as Registered Nurses in California. There are limitations with this license as it is not accepted in all states.

Emphasis is on building nursing theory and re-enforcing concepts to promote, maintain and restore health in individuals with common and complex health problems throughout the life span. Additionally the development and application of nursing skills and concepts utilizing the nursing process in the care of these individuals is emphasized.

The Licensed Vocational Nurse to Registered Nurse Associate of Science student will receive an Associate of Science degree and a certificate of achievement and will be eligible to take the National Council Licensing Examination-Registered Nurse (NCLEX-RN) and if successful will qualify to receive a license from the Board of Registered Nursing to practice nursing in the State of California.

A grade of C or better in all program course work is required to meet the California Board of Registered Nursing regulations.

The PCC Nursing Program's outcomes reflect standards of competency as delineated by the California State Boards of Nursing and the Department of Health Services.

The PCC Nursing Program's outcomes reflect standards of competency as delineated by the California State Boards of Nursing and the Department of Health Services.

English, Humanities, Political Science, US History or American Institutions 125, PE, Critical Thinking are Associate in Science Degree requirements for Pasadena City College.

It is recommended that the student complete as many of the aforementioned non-nursing courses prior to starting the LVN to RN Program.

Program Outcomes:

1. Deliver patient centered care that recognizes the patient or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for patient's preferences and values and needs.
2. Use teamwork and collaboration to function effectively within nursing and interprofessional teams, fostering open communication, mutual respect and shared decision-making to achieve quality patient care.
3. Develop an evidence based practice by integrating best current evidence with clinical expertise and patient/family preferences and values for delivery of optimal health care.
4. Improve safety by minimizing risk of harm to patients and providers through individual performance and quality improvement system methods to continuously improve the quality of health care systems
5. Use informatics, including information and technology, to communicate, manage knowledge, mitigate error, and support decision making.
6. Adhere to standards of professional practice by being responsible for his/her actions and behaviors and practicing nursing within legal, ethical, and regulatory standards.

Licensed Vocational Nurse to Registered Nurse (A.S. Degree) Curriculum

NOTE: The following sequence must be followed:

Prerequisites:

ENGL 001A
PYSO 001
ANAT 025
MICR 002
MATH 402 or higher

Required Courses**Transition**

NURS 210 – Nursing Role Transition (2)

Psychiatric Mental Health Nursing

NURS 042 – Psychiatric Mental Health Nursing (1)
NURS 042L – Psychiatric Mental Health Nursing Lab (1.5)

Intermediate Medical Surgical Nursing

NURS 052A – Intermediate Medical Surgical Nursing (2)
NURS 052L – Intermediate Medical Surgical Nursing Lab (3.5)
NURS 052S – Intermediate Nursing Care – Seminar (1)

Advanced Medical Surgical Nursing

NURS 053 – Advanced Medical-Surgical Nursing (3)
NURS 053L – Advanced Medical-Surgical Nursing – Clinical (5)
NURS 053S – Advanced Nursing Seminar (1)

Recommended Electives

ANAT 110 – Dissection Anatomy (2)
CHEM 002A – Chemistry – General, Organic and Biochemistry (4)
NURS 139 – Intermediate Clinical Pharmacology (2)
NURS 202 – Basic Clinical Skills (3)
NURS 211 – Basic Cardiac Dysrhythmias (1)
NURS 213 – Intravenous Therapy and Blood Withdrawal (1)

Requirements for the Associate in Science Degree – see page 101.

Licensed Vocational Nurse to Registered Nurse – Non-Degree, 30-Unit Option

The Licensed Vocational Nurse to Registered Nurse 30-Unit Option curriculum provides the student with the theory and skills to seek employment in hospitals, clinics, private physician offices, and skilled nursing in extended and long-term care facilities as Registered Nurses in California. There are limitations with this license as it is not accepted in all states.

Emphasis is on building nursing theory and re-enforcing concepts to promote, maintain and restore health in individuals with common and complex health problems throughout the life span. Additionally the development and application of nursing skills and concepts utilizing the nursing process in the care of these individuals is emphasized.

The Licensed Vocational Nurse to Registered Nurse 30-Unit Option student will receive a Certificate of Achievement and will be eligible to take the National Council Licensing Examination-Registered Nurse (NCLEX-RN) and if successful will qualify to receive a license from the Board of Registered Nursing to practice nursing in the State of California.

A grade of C or better in all program course work is required to meet the California Board of Registered Nursing regulations.

The PCC Nursing Program's outcomes reflect standards of competency as delineated by the California State Boards of Nursing and the Department of Health Services.

As specified by the California Board of Registered Nursing, the additional education required of licensed vocational nurse applicants using the LVN 30 Unit Option shall not exceed a maximum of 30 semester units, including prerequisites. The PCC LVN 30 Unit Option includes a total of 29 semester units and meets BRN requirements.

Program Outcomes:

1. Deliver patient centered care that recognizes the patient or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for patient's preferences and values and needs.
2. Use teamwork and collaboration to function effectively within nursing and interprofessional teams, fostering open communication, mutual respect and shared decision-making to achieve quality patient care.
3. Develop an evidence based practice by integrating best current evidence with clinical expertise and patient/family preferences and values for delivery of optimal health care.
4. Improve safety by minimizing risk of harm to patients and providers through individual performance and quality improvement system methods to continuously improve the quality of health care systems
5. Use informatics, including information and technology, to communicate, manage knowledge, mitigate error, and support decision making.
6. Adhere to standards of professional practice by being responsible for his/her actions and behaviors and practicing nursing within legal, ethical, and regulatory standards.

Licensed Vocational Nurse to Registered Nurse Curriculum

Prerequisites:

PYSO 001
MICR 002

Required courses

Transition

NURS 210 – Nursing Role Transition (2)

Psychiatric Mental Health Nursing

NURS 042 – Psychiatric Mental Health Nursing (1)
NURS 042L – Psychiatric Mental Health Nursing (1.5)

Intermediate Medical Surgical Nursing

NURS 052A – Intermediate Medical Surgical Nursing Care (2)
NURS 052L – Intermediate Medical Surgical Nursing Lab (3.5)
NURS 052S – Intermediate Nursing Care – Seminar (1)

Advanced Medical Surgical Nursing

NURS 053 – Advanced Medical-Surgical Nursing (3)
NURS 053L – Advanced Medical-Surgical Nursing–Clinical (5)
NURS 053S – Advanced Nursing Seminar (1)

Recommended Electives

ANAT 110 – Dissection Anatomy (2)
CHEM 002A – Chemistry–General, Organic and Biochemistry (4)
MA 109 – Health Information Technology (1)
MA 115 – Medical Terminology (3)
NURS 139 – Intermediate Clinical Pharmacology (2)
NURS 200 – Nursing Laboratory (1)
NURS 202 – Basic Clinical Skills (3)
NURS 211 – Basic Cardiac Dysrhythmias (1)
NURS 213 – Intravenous Therapy and Blood Withdrawal (1)

PARALEGAL STUDIES

(Business)

Paralegal Studies – Associate in Science Degree, Certificate of Achievement

Top Code: 1402.00

The curriculum prepares students to assist attorneys as paralegals (legal assistants) in administrative agencies, corporations, insurance companies, private law firms, government, and other legal environments. Emphasis is on training students in both civil and criminal matters. Some of the services that the paralegal (legal assistant) provides are legal research, development of law office systems, client interviews, drafts pleadings, briefing cases, legal calendaring, preparing discovery for litigated cases, preparing wills and trusts, maintaining corporate records and minutes. This program has been approved by the American Bar Association.

A Certificate of Achievement is awarded upon completion of all required Paralegal Studies core courses with a grade of C or better.

Program Outcomes:

1. The ability to cope with case management, complete paralegal tasks, and understand the client relationship.
2. The people skills to be a competent paralegal.
3. Competence to work in the legal environment.

NOTE: A Paralegal (Legal Assistant) may not engage in, encourage, or contribute to any act which could constitute the unauthorized practice of law.

In order to be eligible to receive a Certificate of Achievement in Paralegal Studies, a student must (1) be a graduate of an accredited high school, or have a G.E.D., and (2) complete a total of 60 units, consisting of the following courses:

1. All required Legal core courses listed below (32 units):
 - BUS 012A, Business Law (3)
 - PLGL 134, Introduction to Paralegal Studies (3)
 - PLGL 135A, Wills, Trusts, and Probate Administration (3)
 - PLGL 137, Legal Writing and Drafting (3)
 - PLGL 138, Paralegal Studies Field Practice (4)
 - PLGL 139, Tort Law and Claims Investigation (3)
 - PLGL 141, Civil and Criminal Evidence (3)
 - PLGL 142, Law Office Procedure and Ethics (3)
 - PLGL 145A, Legal Research (3)
 - PLGL 145B, Computer Aided Research (1)
 - PLGL 146, Computer Use for the Law Office (2)
 - PLGL 150, Paralegal Studies Graduate Seminar (1)

Recommended sequence:

Semester I

BUS 012A – Business Law (3)
PLGL 134 – Introduction to Paralegal Studies (3)
PLGL 135A – Wills, Trusts, Probate Administration (3)
PLGL 139 – Tort Law and Claims Investigation (3)

Semester II

PLGL 137 – Legal Writing and Drafting (3)
PLGL 138 – Paralegal Studies Field Practice (4)
PLGL 146 – Computer Use for the Law Office (2)
Elective

Semester III

PLGL 141 – Civil and Criminal Evidence (3)

PLGL 142 – Law Office Procedures and Ethics (3)

PLGL 145A – Legal Research (3)

Elective

Semester IV

PLGL 145B – Computer Aided Research (1)

PLGL 150 – Paralegal Studies Graduate Seminar (1)

Elective

Elective

NOTE: Those students enrolling in the Paralegal Studies program with a Bachelor's degree need to complete only the Paralegal core courses listed under #1 above; items #2 and #3 below are not required.

2. 18 units of General Education courses, listed in the Pasadena City College Catalog, in the section titled, "Associate in Sciences Degree Requirements," to be chosen from the following categories:

- a. Category Two, A, Natural Sciences, 3 units
- b. Category Two, B, Social & Behavioral Sciences, 3 units
- c. Category Two, C, Humanities, 3 units
- d. Category Two, D, Language & Rationality, 9 units chosen from:
 - (1) English Composition (3)
 - (2) Oral Communication (3)
 - (3) Mathematics/Critical Thinking (3)

General Education courses that are excluded from the list of acceptable courses are: MICR 108, BUS 011A, BUS 014AB, BUS 115, CS 006, CIS 062, ELTN 010, ELTN 109B.

Note: Courses taken to complete the 18 units required in #2 above may not be used to satisfy any of the optional General Education course selections.

It is strongly recommended that students complete the general education course requirements prior to taking the legal specialty courses.

3. 10 elective units, chosen from the following elective courses (any combination of General Education or Paralegal Studies):

General Education:

American Institutions 125 (3)

Health Education, any (2)

History 007AB, 025A–D, 029AB, 041 (3)

Physical Education, any (2)

Political Sciences 001, 007 (3)

Paralegal Studies courses:

BUS 012B, Business Law Transactions & Organizations (3)

PLGL 135B, Wills, Trusts and Probate Administration (3)

PLGL 136, Property Law, Bankruptcy and Creditor's Rights (3)

PLGL 138, Paralegal Studies Field Practice repeat (4)

PLGL 140, Family Law and Dissolution Procedures (3)

PLGL 143, Workers' Compensation Law (3)

PLGL 148, Immigration Law (3)

Requirements for the Associate in Science Degree – see page 101.

PHILOSOPHY

(Social Sciences Division)

Philosophy – Associate in Arts Degree for Transfer to CSU

TOP Code: 1509.00

Philosophy includes the study of ethics, political theory, logical argumentation, theories of knowledge and belief formation, metaphysics, aesthetics, and individual and social values. The Philosophy Program at Pasadena City College enables successful students to develop logical thinking skills, interpret complex texts, and understand and apply philosophical content, theories, and methodology to real-world scenarios. The Associate of Arts in Philosophy for Transfer degree is designed to assist students in transferring to a CSU major in Philosophy.

The Associate of Arts in Philosophy for Transfer degree requirements:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University.
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.
- All courses in the major must be completed with a grade of "C" or better.
- A "P" (Pass) grade is not acceptable grade for courses in the major. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Program Outcomes:

1. Critically engage and thoughtfully respond to historical and contemporary arguments, ideas, and theories common in the field of philosophy.
2. Apply major philosophical concepts (from ethics, logic, epistemology, and philosophy of mind) to complex issues of the 21st century.
3. Demonstrate original analytical and critical writing relevant to philosophical discourse.

Associate in Arts in Philosophy for Transfer Degree

REQUIRED CORE: Select 2 courses (6 units)

PHIL 030 – Introduction to Logic (3)

or PHIL 033 – Introduction to Symbolic Logic (3)

PHIL 001 – Introduction to Philosophy (3)

or PHIL 001H – Honors Introduction to Philosophy (3)

or PHIL 003 – Ethics (3)

LIST A: Select 1 course (3 units)

ANY REQUIRED CORE COURSE NOT ALREADY USED

PHIL 020A – History of Ancient Philosophy (3)

PHIL 020B – History of Modern Philosophy (3)

LIST B: Select 2 courses (6 units)

Any LIST A course not already used from LIST A

HIST 001A – History of European Civilization to 1715 (3)

HIST 001B – History of European Civilization from 1715 (3)

PHIL 037 – Philosophy of Religion (3)

LIST C: Select 1 course (3 units)

Any LIST A or LIST B course not already used

REQUIRED SUBTOTAL..... 18
CSU General Education or IGETC CSU Pattern.....39-37
Transferable Electives (as needed to reach 60 transferable units)

DEGREE TOTAL 60

PHOTOGRAPHY

(Visual Arts and Media Studies Division)

Digital Image Editing – Occupational Skills Certificate

Top Code: 0614.00

This certificate provides students with the skills for entry-level work as a digital image editing specialist in a variety of settings, including advertising, freelance, or a photography studio or lab. Emphasis is on creative application of digital image editing software.

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate thorough understanding of cameras, exposure controls, and photographic principles.
2. Perform digital image editing techniques for color correction, compositing, and file preparation.

Requirements for the Occupational Skills Certificate (12 units):

PHOT 021 – Introduction to Black and White Photography (3)
PHOT 030 – Introduction to Digital Image Editing (3)
PHOT 031 – Beginning Digital Photography (3)
PHOT 130 – Advanced Digital Image Editing (3)

Foundation in Photography – Occupational Skills Certificate

Top Code: 1012.00

This certificate provides students with general photographic skills required to work in a freelance capacity or as an assistant to a portrait, wedding, event, headshot, product, food, industrial, news, or fine art photographer. Skills acquired include digital photography, digital workflow, professional lighting, working with models/subjects, and large format photography. If students decide to pursue the more in depth Photography Certificate of Achievement, many of the courses from the Portrait Photography Occupational Skills Certificate will apply to the Photography Certificate of Achievement.

Program Outcomes:

1. Demonstrate thorough understanding of film and digital cameras, exposure controls, and photographic principles.
2. Produce a portfolio of images that exhibits knowledge of natural and artificial lighting techniques, large format photography, and portraiture techniques.

Requirements for the Occupational Skills Certificate (12 units):

PHOT 021 – Introduction to Black and White Photography (3)
PHOT 022A – Large Format Photography (3)
PHOT 031 – Beginning Digital Photography (3)
 or PHOT 033 – Portrait Photography (3)
PHOT 040 – Fashion Photography (3)

Photography – Associate in Science Degree, Certificate of Achievement

Top Code: 1012.00

The certificate curriculum prepares students to seek entry-level employment in a variety of commercial photographic specialties (for example, photojournalism, portraiture, fashion, architectural, product, etc.). Instruction is offered in cameras, aesthetics, color and black and white, film and digital, darkroom procedures, digital image editing, lighting, and business practices for photographers. Students completing the program will have developed a portfolio.

A Certificate of Achievement is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate technical knowledge through the effective use of tools.
2. Analyze aesthetic and cultural values inherent in photographic works.
3. Demonstrate through the creation of a portfolio of work (for transfer or entry-level employment) the ability to communicate effectively.

Requirements for the Certificate of Achievement (33 units):

Recommended sequence:

Semester I

ART 031A – Color and Composition–Two Dimensional Design (3)
PHOT 010 – History of Photography (3)
 or ART 001B – History of Western Art (3)
PHOT 021 – Introduction to Black and White Photography (3)

Semester II

PHOT 030 – Introduction to Digital Image Editing (3)
PHOT 031 – Beginning Digital Photography (3)
 or PHOT 023A – Color Photography (3)
PHOT 033 – Portrait Photography (3)
 or PHOT 040 – Fashion Photography (3)

Semester III

PHOT 022A – Large Format Photography (3)
PHOT 132 – Advanced Digital Photography (3)
 or PHOT 023B – Advanced Color Photography (3)
PHOT 136 – Video for Photographers (3)

Semester IV

PHOT 135 – Advanced Photography (3)
PHOT 140 – Professional Practices For Photographers (3)

Recommended electives

ART 005 – Art Fundamentals (3)
ART 011A – Foundation Drawing (3)
ART 016 – Perspective (3)
ART 050A (DMA 020A) – Introduction to Graphic Design & Advertising (3)
ART 050B (DMA 020B) – Intermediate Graphic Design & Advertising (3)
ART 050C (DMA 020C) – Advanced Graphic Design & Advertising (3)
ART 104 – History of American Art (3)
BUS 116 – Small Business Management (3)
GRFX 080 – Graphic Reproduction Fundamentals (2)
JOUR 021 – Beginning Press Photography (3)
JOUR 022 – Advanced Press Photography (3)
PHOT 024A – Alternative Processes In Photography (3)
PHOT 024B – Experimental Photography (3)
PHOT 131 – Zone System of Photography (3)

Requirements for the Associate in Science Degree – see page 101.

Portrait Photography – Occupational Skills Certificate

Top Code: 1012.00

This certificate provides students with the skills to work in a freelance capacity or as an assistant to a portrait, wedding, event, or headshot photographer. Skills acquired include digital photography, digital workflow, professional lighting, and working with models/subjects. If students decide to pursue the more in depth Photography Certificate of Achievement, many of the courses from the Portrait Photography Occupational Skills Certificate will apply to the Photography Certificate of Achievement.

An Occupational Skills Certificate is awarded upon successful completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate thorough understanding of film and digital cameras, exposure controls, and photographic principles.
2. Produce a portfolio of images that exhibits knowledge of natural and artificial lighting techniques and portraiture techniques.

Requirements for the Occupational Skills Certificate (9 units):

PHOT 021 – Introduction to Black and White Photography (3)
PHOT 031 – Beginning Digital Photography (3)
PHOT 033 – Portrait Photography (3)
or PHOT 040 – Fashion Photography (3)

PHYSICS

(Natural Sciences Division)

Physics – *Associate in Science Degree for Transfer to CSU*

Top Code: 1902.00

The Associate in Science in Physics for Transfer provides a foundation in Physics necessary for continued training at the upper division level for Physics majors. It also provides a foundation for majors in physical science, math, engineering, and computer science. It is a starting point for students who are preparing for careers in education, geoscience research, and government, where scientific and technical skills are in great demand.

The Associate in Science in Physics for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better. (Students completing this degree are not required to fulfill additional PCC graduation requirements.)

Associate in Science in Physics for Transfer Degree

REQUIRED COURSES (25 units)

PHYS 001A – Physics for Scientists and Engineers I: Mechanics (5)

PHYS 001B – General Physics (5)

PHYS 001C – General Physics (5)

MATH 005A – Single Variable Calculus I (5)

MATH 005B – Single Variable Calculus II (5)

REQUIRED SUBTOTAL 25

CSU General Education or IGETC CSU Pattern 37-39

DEGREE TOTAL 60

POLITICAL SCIENCE

(Social Sciences Division)

Political Science – *Associate in Arts Degree for Transfer to CSU*

Top Code: 2207.00

Knowledge of the past is a prerequisite for understanding the present and preparing for the future. The Associate in Arts in Political Science for Transfer Degree offers an array of courses designed to enable students to comprehend how they, their nation, and the contemporary world have been shaped by historical events and forces. It is only by studying the Political Science of other civilizations and cultures that we hope to gain perspective on our own. In addition to producing teachers and historical researchers, the AA-T in Political Science helps prepare students for other careers. Majoring in Political Science is excellent preparation for students interested in a teaching career, the legal profession, or advanced work in the discipline. Students wishing to become business executives, administrators, and public servants profit immensely by gaining the methodological skills of the historian. Historians learn to gather, synthesize, analyze, and interpret evidence; they become skilled in presenting their conclusions to a general audience in a lucid and logical manner. Political Science is an excellent foundation for a broadly based education in the liberal arts.

The Associate in Arts in Political Science for Transfer Degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General

Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better. (Students completing this degree are not required to fulfill additional local graduation requirements)

Program Outcomes:

1. Demonstrate through original written and/or oral analysis the ability to identify important events in historical eras; evaluate variables of historical phenomena; and analyze the causes and impact of significant change in a global context.
2. Demonstrate awareness and critique the value of varied sources of historical information including professional lectures, secondary texts, primary documents, visual arts, fiction, oral histories, community studies, and/or current journalistic reports.
3. Demonstrate responsibility as self-directed listeners, readers, and researchers.
4. Compare and contrast the experiences and issues of subsets of minorities with that of mainstream in power, including concerns of race, class, and gender.
5. Demonstrate respect for diversity of opinions on historical debates.
6. Apply the analysis of Political Science to create a plan for fulfilling your own civic responsibilities as community and international citizens.

Associate in Arts in Political Science for Transfer Degree

REQUIRED CORE: 3 units

POLS 001 – Introduction to American Government and Politics (3)

LIST A: Select 3 Courses (9–10 units)

POLS 002 – Comparative Government (3)
 POLS 006 – The US and World Politics (3)
 POLS 007 – Principles of Political Science (3)
 POLS 022 – Introduction to Political Theory (3)
 STAT 018 – Statistics for Behavioral and Social Sciences (4)
 or STAT 050 – Elementary Statistics (4)

LIST B: Select any two Courses from below or any List A course not used above (6 units)

ANTH 002 – Cultural Anthropology (3)
 ECON 001A – Principles of Economics (3)
 ECON 001B – Principles of Economics (3)
 GEOG 002 – Cultural Geography (3)
 POLS 021 – Introduction to Political Economy (3)

REQUIRED SUBTOTAL..... 18–19
 CSU General Education or IGETC CSU Pattern.....37-39
 Transferable Electives (as needed to reach 60 transferable units)

DEGREE TOTAL 60

PSYCHOLOGY

(Social Sciences Division)

Psychology – Associate in Arts Degree for Transfer to CSU

Top Code: 2001.00

Psychology is the scientific study of human and animal behavior and mental processes, including cognition, emotion, sensation, perception, and interaction. In pursuing the Associate in Arts in Psychology for Transfer Degree, students acquire skills in research, information gathering, and analytic thinking. Students majoring in psychology develop critical thinking, problem solving, and written and verbal communication skills. As psychology majors, students have learning opportunities that are relevant to many types of careers, including business, education, government, nonprofit organizations, and within health and human services, etc.

The Associate in Arts in Psychology for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Program Outcomes

1. Demonstrate an understanding of behavior and cognitive processes.
2. Demonstrate an understanding of cross cultural and contemporary psychological perspectives.
3. Explain psychodynamic principles.
4. Demonstrate an understanding of ethical principles in psychological research.
5. Research and apply psychological concepts and theories to scientific and/or popular media.

Associate in Arts Degree in Psychology for Transfer

REQUIRED COURSES (11 units)

- PSYC 001 – Introductory Psychology (3)
- PSYC 005 – Research Methods in Psychology (4)
- STAT 018 – Statistics for Behavioral and Social Sciences (4)
or STAT 050 – Elementary Statistics (4)

LIST A: Select one course (3–4 units)

- BIOL 003 – Topics in Human Biology (4)
- BIOL 011 – General Biology (4)
- PSYC 002 – Elementary Physiological Psychology (3)

LIST B: Select one course from below (3–4 units)

- PSYC 021 – Developmental Psychology: The Child (3)
- PSYC 022 – Developmental Psychology: The Adult (3)
- PSYC 024 – Lifespan Developmental Psychology (3)

LIST C: Select one course (3 units)

- PSYC 023 – Social Psychology (3)
- PSYC 025 – Human Sexuality (3)
- PSYC 029 – Psychology of the Afro-American (3)
- PSYC 031 – Studies in Chicano Behavior (3)
- PSYC 033 – Psychology of Personal and Social Adjustment (3)
- PSYC 041 – Psychology of the Asian American (3)

REQUIRED SUBTOTAL.....	20-22
CSU General Education or IGETC CSU Pattern.....	37-39
Transferable Electives (as needed to reach 60 transferable units)	
DEGREE TOTAL	60

PUBLIC HEALTH SCIENCE

(Kinesiology, Health and Athletics Division)

Public Health Science – Associate in Science Degree for Transfer to CSU

Top Code: 1201.00

The Associate in Science in Public Health Science for Transfer focuses on disease and injury prevention strategies for community and individual wellness. The Associate in Science in Public Health Science for Transfer is designed to provide students a clear transfer pathway to the CSU within the health science field major and the completion of baccalaureate degree, with guaranteed admission to a CSU to a similar major with junior standing, and the ability to complete their remaining requirements within 60 semester or 90 quarter units.

Additionally, the Associate in Science in Public Health Science for Transfer focuses on providing job related and introduction to the various career pathways within this field. The public health field includes disciplines such as patient health navigator, health education outreach, epidemiology, biostatistics, health services, environmental health, behavioral health, and occupational health. Skill competencies include knowledge of public health models, health risk assessments, health screenings, health promotion programming, and surveillance of disease outbreaks in a community.

Associate Degree for Transfer Requirements

- 60 semester or 90 quarter CSU-transferable units.
- the California State University-General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.
- a minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district.
- obtainment of a minimum grade point average (GPA) of 2.0.
- earn a grade of C or better in all courses required for the major or area of emphasis.

Program Outcomes

1. Demonstrate the ability to comprehend, apply the multi-dimensional approach of public health sciences.
2. Identify proactive factors for disease prevention and risk factors for disease and disability.
3. Demonstrate and apply behavior-changing techniques to maximize health and wellness.
4. Demonstrate the concepts of research, program planning and evaluation strategies.

Associate in Science Degree in Public Health Science for Transfer

REQUIRED CORE COURSES (29-30 units)

HED 044 – Health Education (3)
HED 050 – Introduction to Public Health (3)
STAT 050 – Elementary Statistics (4)
BIOL 011 – General Biology (4)
 or BIOL 011H – Honors General Biology (4)

CHEM 002A – Introduction to Chemistry (4)
 or CHEM 001A – General Chemistry and Chemical Analysis (5)
 PSYC 001 – Introduction to Psychology (3)
 ANAT 025 – Human Anatomy (4)
 PYSO 001 – Human Physiology (4)

LIST A: Select 1 course from below (3 units)

ECON 001B – Principles of Economics (3)
 ECON 001A – Principles of Economics (3)
 NUTR 011 – Human Nutrition (3)
 PSYC 025 – Human Sexuality (3)
 HED 051 – Health and Social Justice (3)
 HED 052 – Drugs, Health, and Society (3)
 SOC 001 – Introductory Sociology (3)

REQUIRED SUBTOTA 32-33 units
 CSU General Education or IGETC Pattern..... 37-39 units

DEGREE TOTAL60 units

RADIOLOGY
(Health Sciences Division)

Radiologic Technology – Associate in Science Degree, Certificate of Achievement

Top Code: 1225.00

The curriculum prepares students to work as a Radiologic Technologist in the medical field. Employment opportunities are in offices, clinics and hospitals, education, sales, and management.

The program is accredited by the Joint Review Commission on Education in Radiologic Technology (JRCERT), in coordination with the California Department of Public Health, Radiologic Health Branch (CDPH-RHB). Upon successful completion of the program the student is eligible to take the American Registry of Radiologic Technologist Examination (ARRT). Upon successfully passing the examination a student then would need to apply to the State of California for their Radiologic Technology License.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better; an Associate in Science degree is awarded upon attainment of a Certificate of Achievement **and** completion of all general education requirements for the AS degree with a minimum grade point average of 2.0 in these general education courses.

Prerequisite Course Requirements are: All of the General Education courses that lead to an Associate Degree be completed prior to admission to the program.

These are the required prerequisites for the program:

Physics 010 and 010L
 Anatomy 025, Physiology 001
 Chemistry 002A or higher level of Chemistry,
 Intermediate Algebra or higher level of Math
 Medical Terminology (3 unit class)

(Physiology 002A and 002B can be substituted for Anatomy 025 and Physiology 001.)

For the selection criteria for admission to the program refer to the Radiologic Technology Brochure or see a PCC Counselor.

Effective January 2015, an applicant must have an Associate or higher degree for eligibility for ARRT Certification.

Program Outcomes:

1. Maintain clinical competency and ability to produce radiographic images of acceptable quality.
2. Demonstrate problem-solving skills and effective communication skills.
3. Demonstrate pursuit of lifelong professional growth and development.
4. Assume leadership roles in the Radiologic Technology professional community.

Requirements for the Certificate of Achievement (68.5 – 71.5 units):

Recommended sequence:

First Summer Session First Year Students

RDTC 100 – Basic Radiologic Technology Practices (2)
RDTC 101 – Medical Procedures for the Technologist (3)

First Fall Semester First Year Students

RDTC 102 – Radiation Protection (3)
RDTC 103A – Radiographic Anatomy and Positioning (3.5)
RDTC 110 – Professional Ethics (2)
RDTC 112A – Radiologic Physics (3)
RDTC 117A – Clinical Experience (2)

First Spring Semester First Year Students

RDTC 103B – Radiographic Anatomy and Positioning (3.5)
RDTC 104 – Principles of Radiographic Exposure (3)
RDTC 112B – Radiologic Physics (3)
RDTC 117B – Clinical Experience (2)

Second Summer Session

RDTC 113A – Clinical Learning Experience (2)
RDTC 119 – Clinical Experience (6.5)

Second Fall Semester Second Year Students

RDTC 103C – Radiographic Anatomy and Positioning (3)
RDTC 105 – Special Radiographic Procedures (3)
RDTC 111 – Computerized Imaging (2)
RDTC 117C – Clinical Experience (4)

Second Spring Semester Second Year Students

RDTC 116 – Perspectives in Radiologic Technology (2)
RDTC 117D – Clinical Experience (4)
RDTC 118 – Fluoroscopy (3)

Second Spring Semester – Choose one or both

RDTC 121 – Mammographic Procedures (3)
or RDTC 123 – Computerized Tomography (3)

Third Summer Session

RDTC 113B – Clinical Learning Experience (6)

Requirements for the Associate in Science Degree – see page 101.

SOCIAL & BEHAVIORAL SCIENCES

(Social Sciences Division)

Social & Behavioral Sciences – Associate in Arts Degree

Top Code: 4901.00

The degree in social and behavioral sciences is concerned with providing a broad understanding of the social, cultural, and intellectual world in which we live. Social and behavioral science students have a diverse interest in human problems and seek a liberal education in a broad spectrum of understandings, insights, and appreciations. Multidisciplinary in nature, this area of emphasis seeks to provide an understanding of the interrelationships and varied methodologies of its many subject areas. The goal of this area of emphasis is to develop students' intellectual and emotional understanding, appreciation, insights, and flexibility in order for them to succeed in government services, commerce or industry, and teaching. Students who receive an associate degree in the Social and Behavioral Sciences typically continue their studies at a university to receive a bachelor's degree in such disciplines as Anthropology, Economics, Geography, History, Linguistics, Political Science, Psychology, or Sociology.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with Counseling Services to determine the particular transfer requirements of specific transfer institutions.*

Requirements for the area of emphasis (18 units minimum)

Courses must be completed with a grade of C or better. All courses must be numbered 001–099. Students must complete 18 units with at least 3 units in three of the disciplines listed below.

Anthropology

ANTH 001 – Physical Anthropology (3)
ANTH 001L – Laboratory in Physical Anthropology (1)
ANTH 002 – Cultural Anthropology (3)
ANTH 003 – Introduction to Archaeology (3)
ANTH 004 – Anthropology of Religion, Magic, Witchcraft (3)
ANTH 005 – Introduction to Linguistic Anthropology (3)
ANTH 012 – American Indian Cultures (3)
ANTH 030A – Anthropological Field Studies – Mesa Verde, Colorado (2)
ANTH 030B – Anthropological Field Studies: Rio Grande Pueblos–New Mexico (2)
ANTH 030C – Anthropological Field Studies: California (2)
ANTH 030D – Anthropological Field Studies: Rocky Mountains (2)
ANTH 030E – Anthropological Field Studies: England (2)
ANTH 030F – Anthropological Field Studies: Italy (2)
ANTH 030G – Anthropological Field Studies: Southern California (2)
ANTH 030H – Applications of Archaeological Field Work (2)
ANTH 031 – Mexican and Chicano Culture (3)

Child Development

CHDV 010 – Principles and Practices of Teaching Young Children (3)
CHDV 011 – Infant and Toddler Development (3)

Economics

ECON 001A – Principles of Economics (3)
ECON 001B – Principles of Economics (3)

Geography

GEOG 002 – Cultural Geography (3)
GEOG 003 – World Regional Geography (3)
GEOG 005 – Economic Geography (3)

History

HIST 001A – History of European Civilization to 1715 (3)
HIST 001B – History of European Civilization from 1715 (3)
HIST 002A – History of World Civilizations to 1500 (3)
HIST 002B – History of World Civilizations from 1500 (3)
HIST 005A – History of Great Britain to 1714 (3)
HIST 005B – History of Great Britain from 1714 (3)
HIST 007A – United States History to 1876 (3)
HIST 007B – United States History from 1876 (3)
HIST 008 – History of California (3)
HIST 009A – Latin America: Pre-Colombian to 1825 (3)
HIST 009B – Latin America: 1825 to the Present (3)
HIST 012 – The North American Indian (3)
HIST 016 – History of the Middle East (3)
HIST 018 – History of South Asia, Southeast Asia and the Pacific (3)
HIST 019 – History of China, Japan and Korea (3)
HIST 024A – Special Topics in History – Africa (3)
HIST 024B – Special Topics in History – Asia (3)
HIST 024C – Special Topics in History – Europe (3)
HIST 024D – Special Topics in History – Latin America (3)
HIST 024E – Special Topics in History – Middle East (3)
HIST 024F – Special Topics in History – United States (3)
HIST 024G – Special Topics in History – World (3)
HIST 025A – Great Personalities in U.S. History (3)
HIST 025B – Women in American Society (3)
HIST 025C – The American West (3)
HIST 025D – America's Relations with Other Nations (3)
HIST 025E – Arts and Crafts Movement in the U.S. (3)
HIST 025F – America and the Two World Wars (3)
HIST 025I – Issues of the Vietnam Era (3)
HIST 027A – Traditional Africa (3)
HIST 027B – Modern Africa (3)
HIST 029A – African American History to 1865 (3)
HIST 029B – African American History from 1865 (3)
HIST 030 – History of Mexico (3)
HIST 031 – History of Mexican Americans in the United States (3)
HIST 038 – History of Religion in America (3)
HIST 041 – History of Asian Pacific Americans (3)
HIST 050 – History and Historians (3)

Linguistics

LING 010 – Introduction to Linguistics (3)
 or ENGL – Introduction to Linguistics (3)
LING 011 – History of English Language (3)
 or ENGL 011 – History of English Language (3)
LING 012 – Intercultural Communication (3)
 or ENGL 012 – Intercultural Communication (3)
LING 014 – Language in Society (3)
LING 016 – Psycholinguistics: Language and the Mind (3)
LING 017 – Introduction to Language Acquisition (3)

Political Science

POLS 001 – Introduction to American Government and Politics (3)
POLS 002 – Comparative Government and Politics (3)

POLS 006 – The U.S. and World Politics (3)
POLS 007 – Principles of Political Science (3)
POLS 021 – Introduction to Political Economy (3)
POLS 022 – Introduction to Political Theory (3)

Psychology

PSYC 001 – Introductory Psychology (3)
PSYC 002 – Elementary Physiological Psychology (3)
PSYC 003 – Abnormal Psychology (3)
PSYC 005 – Research Methods in Psychology (4)
PSYC 021 – Developmental Psychology: The Child (3)
PSYC 022 – Developmental Psychology: The Adult (3)
PSYC 023 – Social Psychology (3)
PSYC 024 – Lifespan Developmental Psychology (3)
PSYC 025 – Human Sexuality (3)
PSYC 029 – Psychology of the Afro-American (3)
PSYC 031 – Studies in Chicano Behavior (3)
PSYC 033 – Psychology of Personal and Social Adjustment (3)
PSYC 041 – Psychology of the Asian American (3)

Religious Studies

RELG 001 – Religious Issues, Personalities and Values (3)
RELG 002 – Comparative Religions: Far East (3)
RELG 003 – Comparative Religions: Near East (3)

Sociology

SOC 001 – Introductory Sociology (3)
SOC 002 – Contemporary Social Problems (3)
SOC 014 – Introduction to Ethnic Studies (3)
SOC 015 – Crime, Delinquency and Society (3)
SOC 016 – Urban Sociology (3)
SOC 022 – Sociology of Aging (3)
SOC 024 – Marriage and the Family (3)
SOC 025 – British Life and Culture (3)
SOC 029 – Sociology of the African-American (3)
SOC 031 – Chicano Sociology (3)
SOC 041 – Sociology of the Asian American (3)

Requirements for the Associate in Arts Degree – see page 97.

SOCIOLOGY

(Social Sciences Division)

Sociology – Associate in Arts Degree for Transfer to CSU

Top Code: 2208.00

Sociology is the scientific study of society, social institutions and social relationships. A key contribution of the discipline is that social factors matter. Our lives are not only shaped by personal psychology, but also by our place in the social world. Sociology examines how social structures, such as the workplace, political, economic, educational, and religious institutions affect individuals and how individuals influence these structures. Sociologists also explore how people's socioeconomic

status, race, ethnicity, age, gender, sexualities, and marital status affect their attitudes, behavior, and chances in life. Sociologists organize their knowledge in theories which they both create and test through social research. Often such research is aimed at understanding important social issues and problems. Sociologists study the patterns of behavior that characterize human interaction. They seek to discover the main forces that unite and separate social groups and to determine the conditions that transform social life.

The Associate in Arts in Sociology for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Program Outcomes

1. Articulate the role of sociological theories in multiple social contexts.
2. Identify and explain major sociological and theoretical perspectives.
3. Critically analyze important social issues and problems.
4. Identify patterns of behavior that characterize human interaction.

Associate in Arts Degree in Sociology for Transfer

REQUIRED COURSES: (3 units)

SOC 001 – Introductory Sociology (3)

LIST A: Select 2 courses (7 units)

SOC 002 – Contemporary Social Problems (3)
 STAT 018 – Statistics for Behavioral and Social Sciences (4)
 or STAT 050 – Elementary Statistics (4)

LIST B: Select any 2 courses (6 units)

SOC 014 – Introduction to Ethnic Studies (3)
 SOC 015 – Crime, Delinquency and Society (3)
 SOC 024 – Marriage and the Family (3)
 PSYC 023 – Social Psychology (3)

LIST C: Select any 1 course from below or from any course not used from List B (3 units)

ANTH 002 – Cultural Anthropology (3)
 PSYC 001 – Introductory Psychology (3)
 SOC 016 – Urban Sociology (3)
 SOC 022 – Sociology of Aging (3)
 SOC 029 – Sociology of the African-American (3)
 SOC 031 – Chicano Sociology (3)
 SOC 041 – Sociology of the Asian American (3)

REQUIRED SUBTOTAL.....	19
CSU General Education or IGETC CSU Pattern.....	37-39
Transferable Electives (as needed to reach 60 transferable units)	

DEGREE TOTAL	60
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SPEECH-LANGUAGE PATHOLOGY

(Performing and Communication Arts Division)

Speech-Language Pathology Assistant – Associate in Science Degree

Top Code: 1220.00

This degree prepares students for employment as Speech-Language Pathology Assistants (SLPAs). An SLPA works with clients/patients with communication disorders, under the supervision of a Speech-Language Pathologist (SLP). Communication disorders affect people of all ages, including infants, children, adults and seniors. Students will be trained to assist SLPs with the assessment and treatment of people with articulation, language, voice, fluency and other communication disorders. There are a variety of locations of practice which include educational, clinical and medical settings. Upon successful completion of this degree, the graduate will be eligible to apply to the Speech-Language Pathology & Audiology & Hearing Aid Dispensers Board (SLPAHADB) of the State of California Department of Consumer Affairs for registration as a Speech-Language Pathology Assistant. SLPAHADB recognizes Pasadena City College (PCC) as an approved training program. This is a Career & Technical Education program.

This Associate of Science degree includes requirements for general education and for the major. The major requirements are categorized as "SLPA-designated" major required courses and Other major required courses.

The "SLPA-designated" major required courses include:

- SLPA 018 Introduction to Communication Disorders
- SLPA 107 Phonetics, Articulation, and Phonology
- SLPA 115 Child Language Development and Disorders
- SLPA 119 Speech-Language Pathology: Professional Issues
- SLPA 123A Communication Disorders: Assessment and Remediation
- SLPA 123B Adult Disorders: Remediation
- SLPA 126 Speech-Language Pathology Assistant Field Work
- SLPA 126S Speech-Language Pathology Assistant Field Work Seminar

The Other major required courses include:

- SPCH 010 Interpersonal Communication
- ASL 001 Elementary American Sign Language
- LING 012/ENGL 012 Intercultural Communication
- CHDV 010 Principles and Practices of Teaching Young Children
- CHDV 030 Introduction to Children with Special Needs
- CHDV 105 Children with Challenging Behaviors
- CHDV 122 Practicum in Early Intervention/Special Education
- CHDV 122F Field Practice in Early Intervention/Special Education
- PSYC 024 Lifespan Developmental Psychology (or PSYC 021 AND PSYC 022)
- BIOL 011 General Biology or BIOL 011H Honors General Biology or BIOL 003 Human Biology

There is an application process for admission into the program. For the selection criteria and procedures, refer to the SLPA webpage at www.pasadena.edu/slpa or see a PCC Counselor. Candidates who completed some, but not all, of the "SLPA-designated" courses, beyond SLPA 018, prior to Fall 2019, will need to contact the SLPA Program Coordinator for consideration of program re-entry.

Students may begin taking Other major required courses at any time, referencing the list of required courses.

PCC and the SLPA program may accept previous coursework for general education or major requirements based upon the college's transcript evaluation process. However, no course substitutions will be accepted for the "SLPA-designated" courses.

This program is not designed for candidates who have earned a Bachelor's degree in Communication Disorders or Speech-Language Pathology and require a field work course in order to register with SLPAHADB as an SLPA. The field work course is only offered through the prerequisites of the program.

SLPA 018 is offered Fall and Spring annually and successful completion with a "C" or better is a prerequisite of application.

Students must be admitted to the program to enroll in any of the following "SLPA-designated" courses, which are offered as shown:

Fall Year 1

SLPA 107 (SLPA 018 prerequisite)

Spring Year 1

SLPA 115 (SLPA 018 prerequisite)

SLPA 119 (SLPA 018 prerequisite)

Fall Year 2

SLPA 123A (SLPA 107, SLPA 115, and SLPA 119 prerequisites)

Spring Year 2

SLPA 123B (SLPA 123A prerequisite)

SLPA 126 (SLPA 126S co-requisite. Prerequisite: Enrollment in or completion of SLPA 123B)

SLPA 126S (SLPA 126 co-requisite)

Options:

SLPA 126/126S is offered every Fall and Spring.

Students may elect to take SLPA 126/126S after successful completion of SLPA 123B in a different semester.

Students may be co-enrolled in SLPA 123B and SLPA 126/126S in the Spring semester only.

Students may progress through the program part-time, following the prerequisite requirements.

Before applying for admission, prospective students must consider the following information:

If selected for admission to the program, students are required to submit an application for a pre-clinical check. This may include background information such as County Criminal Records, Social Security Alert, Nationwide Healthcare Fraud & Abuse Registry, and Nationwide Sexual Offender Registry. Additionally, they must complete and submit a negative TB test. The pre-clinical check may also include immunization history and drug screening, as well as other measures. This will be at the student's cost. If the student is not successful, they will forfeit their admission.

Many of the "SLPA-designated" courses, including field work, have a scheduled clinical component, providing students with opportunity for hands-on application of knowledge, at different contracted sites off-campus. It is the responsibility of students to transport themselves.

The majority of the "SLPA-designated" courses are offered during the day, particularly the Year 2 courses, in order to provide access to clinical components.

The culminating course, SLPA 126: Speech-Language Pathology Assistant Field Work, requires students to be available two full days per week, Monday-Friday, for the duration of the semester. The required co-requisite course, SLPA 126S: Speech-Language Pathology Assistant Field Work Seminar, is scheduled in the evenings, once every other week during the same semester.

It is to students' benefit to plan their program of study such that SLPA 126 and SLPA 126S are the final courses they complete before graduation.

Prior to entry into clinical components, students may be required to complete/obtain at their own cost:

- A physical examination
- Criminal background/drug screen check clearance
- CPR, HIPAA training, or other clinical site requirements
- Student malpractice liability insurance

An Associate of Science degree is awarded upon completion of all major required courses with a grade of C or better, and all General Education requirements with the standards determined by the college.

Requirements for the Major (50-53 units):

Required Courses

SLPA-designated courses

- SLPA 018 – Introduction to Communication Disorders (3)
- SLPA 107 – Phonetics, Articulation, and Phonology (3)
- SLPA 115 – Child Language Development and Disorders (3)
- SLPA 119 – Speech-Language Pathology: Professional Issues (3)
- SLPA 123A – Communication Disorders: Assessment and Remediation (3)
- SLPA 123B – Adult Disorders: Remediation (3)
- SLPA 126 – Speech Language Pathology Assistant Field Work (2)
- SLPA 126S – Speech-Language Pathology Assistant Field Work Seminar (1)

Other required courses

- SPCH 010 – Interpersonal Communication (3)
- ASL 001 – Elementary American Sign Language (4)
- BIOL 011 – General Biology (4)
 - or BIOL 011H – Honors General Biology (4)
 - or BIOL 003 Human Biology (4)
- LING 012 – Intercultural Communication (3)
 - or ENGL 012 – Intercultural Communication (3)
- CHDV 010 – Principles and Practices of Teaching Young Children (3)
- CHDV 030 – Introduction to Children with Special Needs (3)
- CHDV 105 – Children with Challenging Behaviors (3)
- CHDV 122 – Practicum in Early Intervention/Special Education (2)
- CHDV 122F – Field Practice in Early Intervention/Special Education (1)
- PSYC 024 – Lifespan Developmental Psychology (3)

(PSYC 021 or PSYC 021H, and PSYC 022 may be taken in place of PSYC 024)

- PSYC 021 – Developmental Psychology: The Child (3)
 - or PSYC 021H – Honors Developmental Psychology: The Child (3)
- PSYC 022 – Developmental Psychology: The Adult (3)

Requirements for the Associate in Science Degree – see page 101.

TELEVISION & RADIO

(Performing and Communication Arts Division)

Broadcast Journalism – *Associate in Science Degree, Certificate of Achievement*

Top Code: 1604.30

The curriculum prepares students in the field of electronic journalism. Students are prepared for positions such as news researcher, assignment editor, news producer, news writer or reporter.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Create effective communication using written, oral and/or audio-visual methods in a media context.
2. Integrate critical thinking in a media context.
3. Integrate professional standards of conduct in a media context.
4. Demonstrate technological proficiency in a media context.

Requirements for the Certificate of Achievement (35–36 units):

Recommended sequence:

Semester I

TVR 001 – Introduction to Electronic Media (3)
TVR 002A – Beginning Audio Production (3)
TVR 007 – Beginning TV Studio Production (3)
TVR 012 – Beginning Announcing and Performing in Electronic Media (3)

Semester II

TVR 018 – Radio and Television Newswriting (3)

Semester III

BIT 025 – Survey of Computer Technology in Business (3)
TVR 014A – Beginning Radio Production (3)
TVR 016A – Video Production (4)

Semester IV

COMM 101 – Communication Field Practice (1)
TVR 004 – Beginning Single Camera Production (3)
TVR 021 – Electronic Media Management (3)
TVR 024 – Electronic News Gathering and Editing (3)
TVR 128C – Broadcast News/Administration Internship (1)
or TVR 129C – Broadcast News/Administration Internship (2)

Recommended Electives

COMM 001 – Survey of Mass Communication (3)
JOUR 004A – Reporting and Newswriting (3)
SPCH 004 – Oral Interpretation (3)
TVR 014B – Advanced Radio Production (3)
TVR 019 – Introduction to Media Aesthetics and Cinematic Arts (3)

Requirements for the Associate in Science Degree – see page 101.

Broadcast Journalism – Occupational Skills Certificate

Top Code: 0604.30

This curriculum prepares students in the field of electronic journalism. Students are prepared for positions such as news researcher, assignment editor, news producer, news writer, reporter, newscaster, field producer, news videographer, and news video editor.

An Occupational Skills Certificate is awarded upon the completion of all required courses with a grade of C or better.

Program Outcomes:

1. Apply production techniques to aural and visual media.
2. Demonstrate professional conduct, including collaborative skills and abilities.
3. Demonstrate technological proficiency.

Requirements for the Occupational Skills Certificate (15–16 units):

TVR 001 – Introduction to Electronic Media (3)
TVR 007 – Beginning TV Studio Production (3)
TVR 018 – Radio and Television Newswriting (3)
TVR 024 – Electronic News Gathering and Editing (3)

Required Electives (3–4 units – any ONE of the following electives):

JOUR 002 – Beginning Journalism (3)
TVR 002A – Beginning Audio Production (3)
TVR 012 – Beginning Announcing and Performing in Electronic Media (3)
TVR 014A – Beginning Radio Production (3)
TVR 015 – Introduction to Media Writing (3)
TVR 016A – Television Production (4)
TVR 019 – Introduction to Media Aesthetics and Cinematic Arts (3)
TVR 021 – Electronic Media Management (3)

Film, Television & Electronic Media – Associate in Science Degree for Transfer to CSU

Top Code: 0604.20

The Associate in Science for Transfer Degree in Film, Television & Electronic Media is designed to build students' performance skills in the areas of the film, television and digital media industries—including production and operations; to enrich students' aesthetic and intellectual proficiency in film, TV & the digital media landscape; and to provide pre-professional training. The AS-T in Film, TV & Electronic Media emphasizes tactile experience in the creation of film productions, live television & radio programming, and both audio and video content designed for digital and portable delivery systems. At the same time, the degree offers courses in all aspects of the film, television, radio and digital media industries, both artistic and academic. Faculty, staff and students work closely together to build a solid foundation in the practical, artistic and historical aspects of film, television, radio and digital media.

The Associate in Science in Film, Television, and Electronic Media for Transfer degree requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.
3. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. All courses in the major must be completed with a grade of "C" or better.
6. A "P" (Pass) grade is not acceptable grade for courses in the major. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Program Outcomes:

1. Create effective communication using written, oral and audio/visual methods in a media context.
2. Integrate critical thinking into a media context.
3. Integrate standards of professional conduct in a media context.
4. Develop technological proficiency in a media context.

Program Requirements:

REQUIRED CORE: Select 2 courses (6 units)

- TVR 001 – Introduction to Electronic Media (3)
or COMM 001 – Survey Of Mass Communication (3)
- TVR 015 – Introduction to Media Writing (3)
- TVR 019 – Introduction to Media Aesthetics & Cinematic Arts (3)

LIST A: Select 1 one from each area (6 units)

AREA 1: AUDIO

- TVR 002A – Beginning Audio Production (3)
- TVR 014A – Beginning Radio Production (3)

AREA 2: VIDEO OR FILM PRODUCTION

- TVR 004 – Beginning Single Camera Production (3)
- TVR 007 – Beginning Tv Studio Production (3)
- CINE 026A – Beginning Electronic Filmmaking (3)

LIST B: Select 1 (3 units) or any course not already used above

- TVR 012 – Beginning Announcing and Performing in Electronic Media
- TVR 016A – Television Production (4)
- TVR 017A – Television and Film Script Writing (3)
- TVR 018 – Radio and Television News Writing (3)
- CINE 026B – Intermediate Filmmaking-Electronic (3)
- CINE 007A – Early Film History (3)
- CINE 007B – Contemporary Film History (3)

LIST C: Select 1 (3-4 units) or any course not already used above

- ART 057 (DMA 070) – Motion Graphics (3)
- TVR 002B – Radio Broadcast Master Control Operations (3)
- TVR 016B – Advanced Television Production (4)
- TVR 021 – Electronic Media Management (3)
- TVR 024 – Electronic News Gathering and Editing (3)
- CINE 027 – Cinematography (3)
- PHOT 030 – Introduction to Digital Image Editing (3)
- MUSC 096A – Introduction to Music Recording and Production (3.5)
- ART 080 (DMA 090) – Foundations of Interactive Game Design (3)

REQUIRED SUBTOTAL..... 18-18.5
CSU General Education or IGETC CSU Pattern..... 37-39
Transferable Electives (as needed to reach 60 transferable units)

DEGREE TOTAL 60

Media Programming & Management – Occupational Skills Certificate

Top Code: 0604.00

This curriculum prepares students for entry-level positions in the managerial areas of commercial, corporate, and public media. With ever expanding media outlets, professional opportunities will continue to grow. Account executives, account executive assistants, program directors, assistant program directors, station managers, audience researchers and other administrative staff will find increased demand.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade C or better.

Requirements for the Occupational Skills Certificate (15–16 units):

TVR 001 – Introduction to Electronic Media (3)

TVR 019 – Introduction to Media Aesthetics and Cinematic Arts (3)

TVR 021 – Electronic Media Management (3)

Required electives (6–7 units – any TWO of the following electives):

BUS 010 – Introduction to Management (3)

TVR 002A – Beginning Audio Production (3)

TVR 007 – Beginning TV Studio Production (3)

TVR 012 – Beginning Announcing and Performing in Electronic Media (3)

TVR 014A – Beginning Radio Production (3)

TVR 015 – Introduction to Media Writing (3)

TVR 016A – Television Production (4)

TVR 017A – Television and Film Script Writing (3)

TVR 018 – Radio and Television Newswriting (3)

Television and Radio - Radio Production – Associate in Science Degree, Certificate of Achievement

Top Code: 0604.10

Radio Production curriculum prepares students to work in various areas of broadcasting and electronic media. Course work covers basic aspects of radio production, audio production, post-production sound, and announcing and writing for broadcast, cable and digital media. Practical internships are offered in professional facilities, including commercial and public broadcast companies, cable television, production and post-production companies. Students selecting the “Radio” track of this program will produce a weekly show for the college radio station. Radio Production students are prepared for such positions as radio hosts/announcers, news reporters, production assistants, program producers, and audio editors for radio.

Some occupations within the industry of radio production and operations are inherently competitive. Students are encouraged to utilize college audio/radio facilities above and beyond coursework to better insure their marketability.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Create effective communication using written, oral and/or audio-visual methods in a media context.
2. Integrate critical thinking in a media context.
3. Integrate professional standards of conduct in a media context. Develop technological proficiency in a media context.
4. Develop technological proficiency in a media context.

Requirements for the Certificate of Achievement (32–35 units):

Recommended sequence:

Semester I

TVR 002A – Beginning Audio Production (3)
TVR 012 – Beginning Announcing and Performing In Electronic Media (3)
TVR 014A – Beginning Radio Production (3)

Semester II

TVR 002B – Radio Broadcast Master Control Operations (3)
TVR 014B – Advanced Radio Production (3)
TVR 015 – Introduction to Media Writing (3)

Semester III

TVR 001 – Introduction to Electronic Media (3)
TVR 004 – Beginning Single Camera Production (3)
 or TVR 007 – Beginning TV Studio Production (3)
COMM 101 – Communication Field Practice (1)

Winter Intersession

TVR 117 – Telecommunications Workshop (1)
 or TVR 119 – Radio Workshop (3)

Summer

TVR 120 – Radio Workshop (2)

Summer

TVR 128B – Radio Operations Internship (1)
 or TVR 128F – Radio Production Internship (1)
 or TVR 129B – Radio Operations Internship (2)
 or TVR 129F – Radio Production Internship (2)

Required Electives (3 units – any ONE of the following electives)

MUSC 129A – Music in Multimedia (3)
TVR 143 – Digital Audio Workstation Skills (3)

Recommended Electives

ELTN 130 – Introduction to Electronics (3)

Requirements for the Associate in Science Degree – see page 101.

Television Operations – Associate in Science Degree, Certificate of Achievement

Top Code: 0604.20

The curriculum prepares students for employment as commercial, corporate, and cable television operators. With the growth of cable and satellite distribution and the continuing development of new communication technologies (high definition television, fiber optics and digital media), expanding opportunities will be available for well-trained individuals.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Create effective communication using written, oral and/or audio-visual methods in a media context.
2. Integrate critical thinking in a media context.
3. Integrate professional standards of conduct in a media context.
4. Develop technological proficiency in a media context.

Requirements for the Certificate of Achievement (25–27 units):

Recommended sequence:

Semester I

TVR 001 – Introduction to Electronic Media (3)
TVR 002A – Beginning Audio Production (3)
TVR 007 – Beginning TV Studio Production (3)

Semester II

TVR 107 – Intermediate TV Studio Operations (5)
TVR 108A – Digital Video Systems (2.5)

Semester III

TVR 024 – Electronic News Gathering and Documentary Production (3)
TVR 041 – Beginning Digital Non-Linear Video Editing (3)
TVR 108B – Video Broadcasting and Streaming (2.5)

Required elective (1–3 units – any ONE of the following):

TVR 117 – Telecommunications Workshop (1)
TVR 119 – Sports Radio Broadcasting Workshop (3)
TVR 120 – Radio Production Workshop (2)
TVR 124 – Television Field Production (3)
TVR 128A – TV Operations Internship (1)

Requirements for the Associate in Science Degree – see page 101.

Television Post Production – Occupational Skills Certificate

Top Code: 0604.30

The program will prepare students for employment as video editors and assistant editors.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Requirements for the Occupational Skills Certificate (15 units):

TVR 007 – Beginning TV Studio Production (3)
TVR 024 – Electronic News Gathering and Editing (3)
TVR 041 – Beginning Digital Non-Linear Video Editing (3)
TVR 141B – Intermediate Digital Non-Linear Video Editing (3)
TVR 142 – Advanced Non-Linear Effects Editing (3)

Television Production – Occupational Skills Certificate

Top Code: 0604.20

This curriculum prepares students for entry-level positions in the commercial, corporate, and public television industries. It also prepares students for entry level positions in related media jobs. The need for broadcast TV, cable, and Internet program content continues to grow. Career opportunities in content creation, development, production, and programming will also expand. Well-trained production assistants, camera grips, associate directors, assistants to producers, production coordinators, programming assistants, assistants to cast and talent agents, non-union directors and studio staff will find increased demand.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Apply production techniques to aural and visual media.
2. Demonstrate professional conduct, including collaborative skills and abilities.
3. Demonstrate technological proficiency.

Requirements for the Occupational Skills Certificate (17 units):

TVR 007 – Beginning TV Studio Production (3)

TVR 016A – Television Production (4)

TVR 016B – Television Production (4)

Required Electives (6 units – any TWO of the following electives):

TVR 015 – Introduction to Media Writing (3)

TVR 017A – Television and Film Script Writing (3)

TVR 018 – Radio and Television Newswriting (3)

TVR 019 – Introduction to Media Aesthetics and Cinematic Arts (3)

TVR 021 – Electronic Media Management (3)

TVR 024 – Electronic News Gathering and Editing (3)

Video Operations – Occupational Skills Certificate

Top Code: 0604.20

This curriculum prepares students for entry-level positions in the commercial and corporate television industries. Cable and satellite TV distribution continues to expand. Qualified master control operators, tape operators, duplication technicians and ingestion operators will be required for both new and traditional forms of television distribution.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Apply production techniques to aural and visual media.
2. Demonstrate professional conduct, including collaborative skills and abilities.
3. Demonstrate technological proficiency.

Requirements for the Occupational Skills Certificate (12 units):

TVR 007 – Beginning TV Studio Production (3)

TVR 107 – Video Studio Controls (5)

TVR 108 – Television Operations (4)

Television and Radio - Video Post-Production – Certificate of Achievement

Top Code: 0604.20

The Post-Production certificate provides formal training for individuals who seek entry into the rapidly growing field of film and television post-production, including professions such as assistant editors, editors, post-production supervisors, visual effects artists and title designers. Students will utilize industry standard hardware, software and operating systems to acquire, manage and edit digital video and audio. Large projects are assigned to allow students to build their portfolios.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Apply production techniques to aural and visual media.
2. Demonstrate professional conduct, including collaborative skills and abilities.
3. Demonstrate technological proficiency.

Requirements for the Certificate of Achievement (25–27 units):

Recommended sequence:

TVR 002A – Beginning Audio Production (3)
TVR 007 – Beginning TV Studio Production (3)
TVR 024 – Electronic News Gathering and Editing (3)
TVR 041 – Beginning Digital Non-Linear Video Editing (3)
TVR 141B – Intermediate Digital Non-Linear Video Editing (3)
TVR 142 – Advanced Non-Linear Effects Editing (3)
TVR 143 – Digital Audio Workstation Skills (3)
TVR 144 – Digital Non-Linear Assistant Editing (3)

Required elective – (1–3 units any ONE of the following electives):

TVR 117 – Telecommunications Workshop (1)
TVR 119 – Radio Workshop (3)
TVR 120 – Radio Workshop (2)
TVR 124 – Television Field Production (3)
TVR 128A – TV Operations Internship (1)
TVR 131 – Advanced Television Operations/Production (2)

Recommended electives

CIS 030 – Networks and Telecommunications (3)

This Certificate of Achievement is not eligible as a major for an Associate Degree.

Video Production – Associate in Science Degree, Certificate of Achievement

Top Code: 0604.20

The curriculum prepares students to work in various areas of broadcasting and electronic media. Coursework covers basic aspects of audio and video production, post-production principles, and writing for commercial, educational and cable companies. Practical internships are offered in professional facilities, including commercial and public broadcast companies, cable television, post-production and production companies. Students are prepared for such positions as production assistants, production coordinators, associate directors, stage managers, researchers, programmers, camera operators, technical directors, and editors.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Create effective communication using written, oral and/or audio-visual methods in a media context.
2. Integrate critical thinking in a media context.
3. Integrate professional standards of conduct in a media context.
4. Demonstrate technological proficiency in a media context.

Requirements for the Certificate of Achievement (36–37 units):

Recommended sequence:

Semester I

TVR 001 – Introduction to Electronic Media (3)
TVR 002A – Beginning Audio Production (3)
TVR 004 – Beginning Single Camera Production (3)
TVR 007 – Beginning TV Studio Production (3)

Semester II

BIT 025 – Survey of Computer Technology in Business (3)
TVR 015 – Introduction to Media Writing (3)
TVR 016A – Television Production (4)
TVR 041 – Beginning Digital Non-Linear Video Editing (3)

Semester III

TVR 016B – Television Production (4)
TVR 021 – Electronic Media Management (3)
TVR 024 – Electronic News Gathering and Editing (3)
TVR 128E – Television Production Internship (1)
or TVR 129E – Television Production Internship (2)

Recommended electives

BUS 009 – Introduction to Business (3)
COMM 001 – Survey of Mass Communication (3)
SPCH 003 – Voice and Diction (3)
SPCH 004 – Oral Interpretation (3)
TVR 012 – Beginning Announcing and Performing in Electronic Media (3)
TVR 014A – Beginning Radio Production (3)
TVR 017A – Television and Film Script Writing (3)
TVR 017B – Television and Film Script Writing (3)
TVR 018 – Radio and Television Newswriting (3)
TVR 019 – Introduction to Media Aesthetics and Cinematic Arts (3)
TVR 124 – Television Field Production (3)

Requirements for the Associate in Science Degree – see page 101.

Writing for Film, Television & Radio – Occupational Skills Certificate

Top Code: 0604.30

This curriculum prepares students for entry-level positions in the commercial, independent, public and corporate film, television and radio industries. Such positions include editorial assistant, assistant copy editor, script reader, script supervisor, researcher, promotions, casting assistant, and assistant to a literary agent.

An Occupational Skills Certificate is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Research, structure, and write dramatic and non-dramatic content for radio, television, and multimedia.

Requirements for the Occupational Skills Certificate (15–16 units):

TVR 015 – Introduction to Media Writing (3)

TVR 017A – Television and Film Script Writing (3)

TVR 017B – Television and Film Script Writing (3)

TVR 018 – Radio and Television Newswriting (3)

Required electives (3–4 units – any ONE of the following electives):

TVR 001 – Introduction to Electronic Media (3)

TVR 016A – Television production (4)

TVR 019 – Introduction to Media Aesthetics and Cinematic Arts (3)

TVR 021 – Electronic Media Management (3)

THEATER ARTS

(Performing and Communication Arts Division)

Theatre Arts – Associate in Arts Degree for Transfer to CSU

Top Code: 1007.00

The Associate in Arts in Theatre Arts for Transfer is designed to build students' performance skills in the area of theatrical production—including acting, stagecraft, and technical theatre; to enrich students' aesthetic and intellectual proficiency in theatre, theatre history, and literature; and to provide pre-professional training. The AA-T in Theatre Arts emphasizes production and experience in the creation of theatrical performances. At the same time, the degree offers courses in all aspects of the theatre, both artistic and academic. Faculty, staff, and students work closely together to build a solid foundation in the practical, artistic, and historical aspects of theatre.

The Associate in Arts in Theatre Arts for Transfer will prepare students for transfer to a CSU system. The AA-T in Theatre Arts will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the major requirements and the Intersegmental General Education Transfer Curriculum (IGETC-CSU) or California State University General Education (CSUGE) requirements with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better. (Students completing this degree are not required to fulfill additional local graduation requirements.)

Program Outcomes:

1. Demonstrate an understanding of theatre concepts, elements, and terminology.
2. Collaborate with others in the production of theatrical works.
3. Research, analyze, and interpret dramatic literature and theatre arts.

Associate in Arts in Theatre Arts for Transfer Degree

REQUIRED CORE: 9 units

THRT 001 – Introduction to Theatre (3)

or THRT 005A – Theatre History I (3)

THRT 002A – Acting Fundamentals (3)

Select (3 units maximum)

THRT 028 – Studio Production (1)

THRT 029 – Rehearsal and Performance (3)

THRT 030 – Stage Techniques (1)

LIST A: Select 9 units

THRT 002B – Intermediate Acting (3)

THRT 009 – Script Analysis (3)

THRT 010A – Makeup for Stage and Screen (3)

THRT 012A – Technical Theatre (4)

THRT 013 – Introduction to Scenic Design (3)

THRT 015 – Costume Crafts (3)

THRT 041 – Fundamentals of Stage Lighting (3)

Selection from the following REQUIRED CORE courses not already used (3 units maximum)

THRT 028 – Studio Production (1)

THRT 029 – Rehearsal and Performance (3)

THRT 030 – Stage Techniques (1)

REQUIRED SUBTOTAL.....18-19

CSU General Education or IGETC CSU Pattern.....37-39

Transferable Electives (as needed to reach 60 transferable units)

DEGREE TOTAL 60

Theater Technology – Associate in Science Degree, Certificate of Achievement

Top Code: 1006.00

The curriculum prepares students for technical careers in professional and educational theater, stage lighting, scenic arts, stage management and related vocations. There are two courses of study offered.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Collaborate with others in the production of theatrical works.
2. Research, analyze, interpret and evaluate dramatic literature and theatre arts.
3. Utilize theatrical tools and technology in order to act as technical support and design for professional theatrical productions.

Requirements for the Certificate of Achievement (32 units):

Recommended sequence:

Semester I

THRT 005A – Theatre History I (3)
or THRT 005B – Theatre History II (3)
THRT 012A – Technical Theater (4)
THRT 030 – Stage Techniques (1)

Semester II

TVR 002A – Beginning Audio Production (3)
THRT 012B – Advanced Technical Theater (4)
THRT 030 – Stage Techniques (1)

Semester III

TVR 007 – Beginning TV Studio Production (3)
THRT 013 – Introduction to Scenic Design (3)
THRT 015 – Costume Crafts (3)

Semester IV

THRT 010A – Makeup for Stage and Screen (3)
THRT 030 – Stage Techniques (1)
THRT 041 – Fundamentals of Stage Lighting (3)

Recommended electives

TVR 104 – Live Sound Reinforcement (3)
THRT 002A – Acting I (3)
THRT 110 – Television/Motion Picture Acting (3)
THRT 131 – Intersession Production Workshop (2)

Requirements for the Associate in Science Degree – see page 101.

WELDING**(Engineering & Technology Division)****Basic Welding – Occupational Skills Certificate**

Top Code: 0956.50

The basic welding skills developed in this certificate program will help an individual stand out when applying for employment in fields such as building construction, automotive technology, truck repair, plumbing, air conditioning, sheet metal, plant maintenance, and other manufacturing trades.

This program includes practice with oxy-acetylene welding, brazing and cutting, Shielded Metal Arc Welding (SMAW) in all positions and Gas Tungsten Arc Welding – also known as Tungsten Inert Gas Welding (TIG).

An Occupational Skills Certificate is awarded upon the completion of all courses with a grade of C or better.

Program Outcomes:

1. Demonstrate the skills required by industry to perform oxy-acetylene welding and cutting.
2. Demonstrate the skills required by industry to perform shielded metal arc welding and gas tungsten arc welding.
3. Interpretation and performance of welding projects from verbal and or drawings provided.
4. Demonstrate safe set-up and operations of welding equipment.
5. Demonstrate the skills required by industry to perform welds on special materials.

Requirements for the Occupational Skills Certificate (4 units):

WELD 044A – Introduction to Gas Welding (1)
WELD 044B – Introduction to Electric Arc Welding (1)
WELD 044C – Advanced Arc Welding, FCAW & SMAW (1)
WELD 145 – Introduction to TIG Welding (1)

Recommended electives

DT 008A – Introduction to Digital Design & Fabrication (3)
MACH 220A – Introduction to Manufacturing Technology (3)
TECH 107A – Technical Calculations (3)

Construction Welding – Associate in Science Degree, Certificate of Achievement

Top Code: 0956.50

The curriculum prepares students to seek employment in the welding/metal working trades as welders, welder's helpers, cutting torch operators, or apprentice fitters. The focus of instruction and practical training experience is on the Shielded Metal Arc Welding (SMAW), semi-automatic Flux Cored Arc Welding (FCAW) and oxy-acetylene welding, brazing and cutting processes. These processes are used in the construction and manufacturing industries. Welding practice prepares the student for the Structural Steel Groove and Light Gauge Structural Certifications. Certification is now considered a mandatory requirement for successful employment in the construction and manufacturing industries.

Metal fabrication skills including blueprint reading, shop math, metal fit-up and production welding techniques. Instruction includes structural steel welding codes and welding theory. Students are required to purchase welding materials and protective clothing.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Perform shielded metal arc (SMAW), flux cored arc welding (FCAW) and oxy-acetylene welding and cutting.
2. Select appropriate equipment and processes for metal/welding operations and demonstrate safe set-up and operations of welding equipment.
3. Evaluate welds to industry standards and prepare inspections reports including welding defects and solutions.
4. Fabricate a part from a blueprint including the layout, assembly, cutting of material guided by welding symbols.
5. Prepare to successfully pass the practical and written L.A. City Structural Steel Certification exam for shielded metal arc (SMAW) and flux cored arc welding (FCAW).

Requirements for the Certificate of Achievement (26 units):

Recommended sequence:

Semester I

WELD 200A – Introduction to Welding (10)
TECH 107A – Technical Calculations (3)

Semester II

WELD 200B – Construction Trade Welding (10)
DT 008A – Introduction to Digital Design & Fabrication (3)

Recommended electives

BIT 010 – Basic Computer Keyboarding (1)
BIT 011A – Computer Keyboarding and Document Processing (2)
DT 017 – Building Construction Technical Graphics (3)
DT 118 – A/E/C Modeling (3)
KINA 032A – Beginning Fitness Activities (1)
MACH 220A – Introduction to Manufacturing Technology (3)
MACH 220B – Intermediate Machine Technology I (3)
MACH 220C – Intermediate Machine Technology II (3)
MACH 220D – Advanced Milling Operations I (3)
MACH 220E – Advanced Milling Operations II (3)
MACH 220F – Advanced Lathe Operations (3)
MACH 220G – Production Technology I (3)
MACH 220H – Production Technology II (3)
MACH 220I – Production Technology III (3)
MACH 220J – Tool Making I (3)
MACH 220K – Tool Making II (3)
MACH 220L – Advanced Prototype Machining (3)
WELD 044A – Introduction to Gas Welding (1)
WELD 044B – Introduction to Electric Arc Welding (1)
WELD 044C – Advanced Arc Welding, FCAW & SMAW (1)
WELD 145 – Introduction to TIG Welding (1)
WELD 150A – Oxy-Acetylene and Arc Welding (5)
WELD 150B – Arc Welding (5)
WELD 150C – Structural Arc Welding (5)
WELD 150D – Tungsten Inert Gas (TIG) Welding (5)

Requirements for the Associate in Science Degree – see page 101.

Gas Tungsten & Gas Metal Welding – Associate in Science Degree, Certificate of Achievement

Top Code: 0956.50

The curriculum prepares students to seek employment in the welding/metal working trades as welders, welder's helpers, cutting torch operators, or apprentice fitters. The focus of instruction and practical welding experience is on the Shielded Metal Arc Welding (SMAW), semi-automatic Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW) and oxy-acetylene welding, brazing and cutting processes. These processes are used in the aero-space and manufacturing industries. Welding practice prepares the student for the Structural Steel Groove and Light Gauge Structural Certification. Gas Tungsten Arc Welding (GTAW) will include the welding of steel, aluminum and stainless steel as used in the aero-space industry.

Metal fabrication skills including blueprint reading, shop math, metal fit-up and production welding techniques. Instruction includes structural steel welding codes and welding theory. Students are required to purchase welding materials and protective clothing.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes:

1. Demonstrate the necessary skills to enter the job market as welders, metal workers or transfer to a four-year school.
2. Demonstrate knowledge of the ethical and social responsibilities, understand and apply safe working procedures to a career in Welding Technology.

3. Demonstrate the value of teamwork in the field of Welding Technology.
4. Demonstrate appropriate mastery of the knowledge, techniques, skills and modern tools used in Welding Technology.
5. Demonstrate skills in Gas Welding, Tungsten Inert Gas, Gas Metal Welding, Electric Arc Welding, Shielded Metal Arc Welding and Flux Cored Arc Welding.
6. Demonstrate the skills required to obtain the American Welding Societies "Structural Steel Welding Certification" and the "Los Angeles City Structural Steel Welding" Licenses.
7. Demonstrate the proper use of related reference tables, diagrams, symbols, abbreviation graphics and charts for analysis for the interpretation of blueprints and specifications.

Requirements for the Certificate of Achievement (29 units):

Recommended sequence:

Semester I

TECH 107A – Technical Calculations (3)

WELD 200A – Introduction to Welding (10)

Semester II

DT 008A – Introduction to Digital Design & Fabrication (3)

MACH 220A – Introduction to Manufacturing Technology (3)

WELD 200C – Semi-Automatic and Gas Tungsten Welding (10)

Recommended electives

BIT 010 – Basic Computer Keyboarding (1)

BIT 011A – Computer Keyboarding and Document Processing (2)

DT 017 – Building Construction Technical Graphics (3)

DT 118 – A/E/C Modeling (3)

KINA 032A – Beginning Fitness Activities (1)

MACH 220B – Intermediate Machine Technology I (3)

MACH 220C – Intermediate Machine Technology II (3)

MACH 220D – Advanced Milling Operations I (3)

MACH 220E – Advanced Milling Operations II (3)

MACH 220F – Advanced Lathe Operations (3)

MACH 220G – Production Technology I (3)

MACH 220H – Production Technology II (3)

MACH 220I – Production Technology III (3)

MACH 220J – Tool Making I (3)

MACH 220K – Tool Making II (3)

MACH 220L – Advanced Prototype Machining (3)

WELD 044A – Introduction to Gas Welding (1)

WELD 044B – Introduction to Electric Arc Welding (1)

WELD 044C – Advanced Arc Welding, FCAW & SMAW (1)

WELD 145 – Introduction to TIG Welding (1)

WELD 150A – Oxy-Acetylene and Arc Welding (5)

WELD 150B – Arc Welding (5)

WELD 150C – Structural Arc Welding (5)

WELD 150D – Tungsten Inert Gas (TIG) Welding (5)

Requirements for the Associate in Science Degree – see page 101.

Instructional Divisions of the College



SECTION VI

INSTRUCTIONAL DIVISIONS OF THE COLLEGE

Division of Business, Engineering, and Technology (Room C121)

Additional information: (626) 585-7341

Business and Computer Technology

A variety of programs is offered in the Business Division. Each specialization provides students with the knowledge and background necessary to progress in a career in business, computer technology, or toward a degree of transfer. Courses may be taken individually or as part of a planned program leading to a Certificate of Achievement, Occupational Skills Certificate, and/or an Associate degree. In addition, many of the courses are transferable to the California State and University of California systems. We also offer an Associate in Science Degree for Transfer (AS-T) in Business Administration. The following occupational curricula are offered in Business and Computer Technology and are appropriate for those individuals who are interested in increasing their job skills and obtaining both stable and gainful employment in the business community: Accounting and Bookkeeping, Administration of Justice, Business Information Technology, Business Administration, Computer Information Systems, Fire Technology, Hospitality Management, Marketing, Paralegal Studies, and Statistics.

Engineering and Technology

Engineering and Technology offers students programs of study which prepare them for lifelong careers in high tech professions. Both incoming students and current professionals are served through our certificate structure, which lead to professional and vocational careers. Interested students are encouraged to transfer to universities and colleges through our articulation process. Transfer programs into private, CSU and UC university programs include: Design Technology, Engineering, Electrical Technology, and Electronics. Technical certificates in careers include the following disciplines: Automotive Technology, Building Construction, Construction Inspection, Design Tech, Engineering Design, Electrical Technology, Solar Energy, Electronics, Engineering, Manufacturing Technology and Welding Technology. Specific certificate program outcomes can be found in the Career and Technical Education section of this *Catalog*.

Division of Health Sciences (CEC Campus Bungalow B6 and Main Campus W204)

Additional information: (626) 585-3378

The Health Sciences Division offers an array of programs for students interested in entering the health care provider workforce. Programs lead to a certificate and/or degree as an Anesthesia Technologist, Dental Assistant, Dental Hygienist, Dental Laboratory Technologist, Emergency Medical Technician, Licensed Vocational Nurse, Medical Assistant, Radiologic Technologist, and Registered Nurse. There is also a Career Ladder option from the Licensed Vocational Nurse program to the Registered Nurse program. Program offerings range from six weeks to one and two years and are fully accredited. Students may have clinical experiences on as well as off campus in professional hospital and educational settings. Specific certificate program outcomes can be found in the Degrees and Certificates section of this *Catalog*.

Division of Performing and Communication Arts (Room CA119)

Additional information: (626) 585-7216

Housed in the **Center for the Arts**, the Performing and Communication Arts Division offers a variety of courses and programs in the disciplines of Performing Arts, Television and Radio, and Speech Communication. The facility includes state-of-the art classrooms, rehearsal spaces, studios, and practice rooms. In addition, the Center for the Arts features three stellar performance and exhibition venues:

- **The Robert and Adrienne Westerbeck Recital Hall** is home for over 80 student and professional performances per year, including master classes, workshops and activities part of the Pamela L. Girard Guest Artist Series.
- **The Center for the Arts Theater** is a professional quality theatre space hosting a variety of stage productions and student workshops.

Performing Arts

The Performing and Communication Arts Division provides comprehensive and challenging courses in the performing arts, including transfer programs for majors in Music, Theater Arts, and Dance; performance opportunities in a wide variety of musical ensembles, theater productions and dance ensembles; and a certificate program in commercial music.

Speech Communication

Speech Communication offers important core courses required for transfer including Public Speaking, Argumentation and Debate and Interpersonal Communication, while the Forensics program provides opportunities for students to excel in intercollegiate speech and debate competitions. The **Speech-Language Pathology Assistant Program** prepares students for work as assistants to qualified Speech-Language Pathologists.

Television and Radio

The Television and Radio department offers certificates in five areas, including Radio Production, Television Production, Television Operations, Broadcast Journalism and Post-Production.

Division of English (Room C245)

Additional information: (626) 585-7371

The English Department provides the core reading, writing, and literature courses for all certificate, degree, and transfer students at PCC. Courses range from basic reading and writing skills to advanced composition and critical thinking, from literature courses for the non-major to British and American literature survey courses for the English major, from how to read a poem to how to write a poem. The English Department also offers study/travel programs including an annual summer trip to the Oregon Shakespeare Festival and regular theatre trips in the spring to London. The English Department also publishes *Inscape*, an annual literary magazine featuring student work. The Department's longstanding commitment to student excellence and success and diversity is exemplified in its major areas: Composition, Reading, Literature, and Creative Writing. Students wishing to major in English have two options: the Associate of Arts English Literature Major and the Associate of Arts in English-Transfer Major.

Division of Languages and ESL (Room C247)

Additional information: (626) 585-3187

The Languages and ESL Division brings together 10 foreign languages, English as a Second Language (ESL), American Sign Language (ASL), and Linguistics. The Division aspires to equip each student with the academic and linguistic resources necessary to improve their reading, writing, listening and speaking skills in a multicultural context. The Division recognizes the value of different cultures and perspectives and aims to integrate this appreciation for diversity into every class we offer. The foreign languages program includes a broad spectrum of classes, ranging from language courses to courses in civilization, cinema, and literature. The intermediate level courses cater to the practical use of language in literary, academic, and professional contexts. The English as a Second Language program builds the communicative foundation for all students who seek to master the language in order to successfully perform at the College and in future academic and workplace environments. It encompasses both a transfer curriculum and learning activities designed to improve the economic condition and quality of life of the diverse communities within the College service areas.

Division of Social Sciences (Room C321)

Additional information: (626) 585-7248

The Social Sciences Division strives to enable students to become active and informed citizens of our diverse and increasingly interdependent world. Our courses expand students' understanding of human society, cultural practices, interpersonal relationships, social institutions, identity formation, and systems of thought. Studying the social sciences gives students the analytical skills to understand and critique social phenomena across diverse cultural and historical contexts. Students in the Social Sciences become agents of change in their local and global communities.

The Social Sciences Division offers courses and programs in three primary areas: the Social Sciences consisting of anthropology, economics, political science, psychology, and sociology; the Humanities consisting of: history, philosophy, and religious studies; and Education consisting of child development and education. The division also supports cross discipline programs such as gender, ethnic, and multicultural studies. The division offers introductory courses to students that satisfy the general education requirements for the College's associate degrees, and for both the California State University system and the

University of California through the IGETC program. In addition more specialized courses are offered for students to satisfy the major requirement in the various certificate and transfer programs. The Child Development program, in conjunction with the Child Development Center, offers eleven certificates in vocational programs.

Division of Natural Sciences (Room SV6)

Additional information: (626) 585-7140

The Division of Natural Sciences at Pasadena City College offers students opportunities to learn and grow as individuals, scientists, scholars, and well-informed citizens. Several Departments exist within the division to serve students in the disciplines of Anatomy, Astronomy, Biology, Chemistry, Computer Science, Environmental Studies, Geography, Geology, Microbiology, Physical Science, Physics, and Physiology.

Division of Mathematics and Computer Science (Room R322)

Additional information: (626) 585-7331

The Mathematics and Computer Science Division has a threefold mission: 1) To rigorously educate students majoring in Science-Technology-Engineering-Mathematics (STEM) fields providing them the mathematical knowledge and skill necessary for tomorrow's STEM careers; 2) To provide a useful, well-rounded, versatile mathematical background for students pursuing a Liberal Arts degree with our Statistics & Liberal Arts Mathematics (SLAM) sequence, and 3) To build a mathematically and computer literate population. A broad range of mathematics courses are offered beginning with Intermediate Algebra up through Differential Equations, for Business and STEM majors, and Statistics for students interested in fields other than STEM. The Computer Science Department offers courses including introduction to computers, programming in a variety of languages and computer data structures, and focuses on preparing students to transfer to 4-year universities.

Courses are offered in a variety of learning modalities including traditional methods of instruction, courses with compressed schedules through our Math Path program, and hybrid-online courses in College Algebra, Calculus, and Statistics.

Division of Kinesiology, Health and Athletics (Room GM201)

Additional information: (626) 585-7225

Kinesiology is the scientific study of human movement and physical activity. Kinesiology draws upon anatomy, physiology, physics, psychology, and sociology to understand how humans move, what motivates human movement, and the physiological and psychological benefits of physical movement. Kinesiology provides opportunities for students to gain current knowledge of physical fitness facts, healthful living practices, leisure time pursuits, stress management techniques, and to receive instruction in the skills necessary for successful participation in activities necessary for optimum health and physical efficiency. The field of Kinesiology includes a variety of subfields including exercise physiology, biomechanics, motor control and motor learning, exercise psychology, and the socio-cultural study of movement. A lack of adequate physical activity negatively impacts the physiological and psychological state of humans. Pasadena City College therefore offers a variety of physical activity classes to complement students' academic pursuits. The kinesiology profession is based on the philosophy that anatomical movement is an academic discipline, an essential portion of the General Education process. Further, the kinesiology curriculum is centered on the concept that movement skills, intellectual development, physical fitness and healthful living practices are elements of life that must be taught and reinforced.

HEALTH

The Health program consists of courses in personal health. These courses are intended to help students live healthfully now and for the rest of their lives. They also serve as foundations for students intending to focus their studies in the health and nutritional sciences, kinesiology or athletics.

NUTRITION

Nutrition offers a variety of courses that align with multiple degree pathways. The courses are specifically designed to meet the needs of students who are currently pursuing degrees in Nursing, Health Science, or Kinesiology. Courses also provide students with an introduction to the science of nutrition, which is particularly important for those planning to transfer to baccalaureate programs in Nutrition, Health Education, Public Health, or pre-medicine.

ATHLETICS

Pasadena City College offers 16 Intercollegiate Athletics programs dedicated to assisting each student in achieving the highest possible academic and athletic success. Our faculty and coaches subscribe to the philosophy that athletics plays an integral role in the total educational process and that athletics helps to promote the growth of values in leadership, character, sportsmanship, and teamwork. Pasadena City College Athletics at Pasadena City College, as with all California community colleges is governed by the general regulations of the State Community College Athletic Code, as well as specific regulations of the Coast Conference in which Pasadena City College holds membership. Students who participate in athletics must meet the requirements of the California Community College Athletic Association CCCAA). Academic standing, enrollment within an intercollegiate class, completed and approved eligibility forms, and a physical exam are required to compete in both the intercollegiate class and intercollegiate sport.

Noncredit Division

Additional information: (626) 585-3000

The Noncredit Division is located at 3035 East Foothill Boulevard, Pasadena, CA, 91107 and is an off-site, satellite instructional center with shuttle services to and from the Colorado Campus every 20 minutes. The Noncredit Division provides education, training, and services designed to continuously improve California's workforce in programs such as Small Business Development and Entrepreneurism. Additionally, vocational, technical, and academic courses in such areas as Adult High School Diploma program, General Education Development (GED), ESL, Adult Basic Education, Parent Education, enrichment classes for Seniors and disabled students, and a wealth of support programs.

Division of Visual Arts and Media Studies (Room CA102)

Additional information: (626) 585-7238

Housed in Pasadena City College's **Center for the Arts**, the Division of Visual Arts and Media Studies offers a variety of courses and programs in the Studio Arts, Design and Media disciplines. The facility includes state-of-the-art classrooms, labs, and studios. The Center for the Arts moreover features stellar exhibition venues:

- **The Boone Family Art Gallery** is an integral part of instruction for courses in many visual art disciplines, and features a juried student show, an annual exhibition of the work of our faculty, and a major exhibition associated with the College's Visual Artist-in-Residence program.
- Situated adjacent to the Center for the Arts, the **George and MaryLou Boone Sculpture Garden** features major pieces, including works by Deborah Butterfield, Jack Zajac, Stephan Balkenhol, and Yutaka Sone.

Studies in studio art include art history, drawing and figure drawing, painting, printmaking, sculpture, illustration, ceramics, jewelry and crafts. The program's annual Visual Artist-in-Residence features a notable professional who interacts closely with students, faculty, and the community; the artist produces works, lectures and conducts workshops.

Studies in Design include illustration, jewelry, crafts, graphic design, advertising graphic design, fashion, product design, interior design, product design-technology, product design-graphics and digital media-graphic design.

Media studies includes courses in Communications, Journalism and Digital Media Arts. The Cinema Program includes courses in filmmaking, film art and the history of film. These programs offer transfer courses and a variety of certificates. Students are prepared for transfer to four-year institutions and for entry-level positions in the media fields.

Studies in Photography include both wet and digital photography in the areas of portraiture, fashion, product and architectural photography, experimental, black and white, and digital imaging.

PASADENA CITY COLLEGE
CATALOG
2019-2020

SECTION VII

Course Descriptions



SECTION VII

COURSE DESCRIPTIONS

All credit courses are listed in the *Catalog*. Following the course number and title are the units of credit that may be earned. The course descriptions describe the total number of lecture and/or laboratory hours that are required for that course per semester.

The following section presents a description of every course offered in the College. Each description is self-contained, i.e., each contains important information on prerequisites, units and hours, limitations on enrollment, recommendations, scheduling by semesters and other data which may be required in making a decision to include the course in the student's program of studies.

Prerequisites/Corequisites/Recommended Preparation

A prerequisite is a condition of enrollment, such as successful completion of another course (with a grade of A, B, C, or P), that must be met BEFORE a student can register for a course or an educational program. Successful completion of a prerequisite demonstrates readiness for the subsequent course or program. By meeting the prerequisite, the student shows that he or she knows certain skills, concepts, and/or information without which the College considers success in the subsequent course or program highly unlikely.

A corequisite is a course in which a student is required to enroll AT THE SAME TIME that he or she is enrolled in another course. In the corequisite course, the student acquires certain skills, concepts, and/or information without which the College considers success in the concurrent course highly unlikely.

A recommended preparation statement in a course description means that a student is advised, but not required, to complete the identified course(s) prior to enrollment in another course or educational program. The skills, concepts, and/or information gained in the recommended preparation in another course or educational program will prepare students for success in the subsequent course or program.

All prerequisites, corequisites, and recommendation preparation statements listed in the course descriptions are periodically reviewed. Students – especially those new to Pasadena City College – should consult the Schedule of Classes and the Counseling Department for the most current information.

Students are expected to meet valid and necessary course prerequisites and corequisites. For information on challenging prerequisites, corequisites, and enrollment limitations, see page 29.

Course Numbering System

Classification I – Courses Numbered 001-099

These Freshman and Sophomore courses generally correspond to university or senior college lower division courses.

Pasadena City College recommends that universities and senior colleges grant subject or elective credit toward Junior standing for courses in this classification. Specific course credit, however, depends upon articulation with the senior institution. Students should consult the catalog of the institution to which they plan to transfer.

Some courses numbered 001-099 can be accepted only as meeting elective requirements at four-year colleges or universities. For further clarification, students should consult counseling services.

Classification II – Courses Numbered 100-399

These courses are technical, semiprofessional or occupationally oriented or they meet community college general education needs.

Classification III – Courses Numbered 400-499

These courses are non-degree applicable and are review and foundation-building courses which are used primarily to qualify students for courses in the transfer classification by satisfying subject or grade deficiencies. Except for certain sequential arrangements, courses in this group are open to all students. Basic skills coursework provides opportunities for students to improve their skills in the areas of mathematics, reading, and writing. These foundation level courses are designed to prepare students for success in further academic work.

Classification IV – Courses Numbered 900-950

These courses are non-degree applicable corequisite courses for specific skills development.

Course Identification Numbering System (C-ID)

The Course Identification Numbering System (C-ID) is a statewide numbering system independent from the course numbers assigned by local California community colleges. A C-ID number indicates that the course is comparable in content and scope to courses offered at other California

community colleges or participating universities (primarily CSU campuses), regardless of the course title or local course number. If a schedule of classes or catalog lists a course that includes a C-ID number, students can be assured that it will be accepted as an equivalent to a course identified with the same C-ID number at another community college. In other words, the C-ID number can be used to identify comparable courses at different community colleges.

The C-ID numbering system is useful for students attending more than one community college and can be used to avoid repeating a class that has been successfully passed at another community college. Students should always go to www.assist.org to confirm how each college's course will be accepted at a particular four-year college or university for transfer credit. Because these course requirements may change and because courses may be modified and qualified for or deleted from the C-ID database, students should always check with a counselor to determine how C-ID designated courses fit into their educational plans for transfer.

The C-ID number can be found in the catalog description.

To view the complete list of PCC courses with C-ID approval, please visit: <https://c-id.net/courses> and choose Pasadena City College from the drop-down menu.

Grade Mode Definitions

There are three grade mode (grading options) at PCC, however, not every option is available for every class.

L – Letter grade. See page 51 for a complete description.

A – Audit. See page 67 for a complete description.

P – Pass/No Pass. See page 52 for a complete description.

DIVISIONS

Courses are listed alphabetically by sub-department. Divisions of the College, with their sub-departments, are:

BUSINESS and ENGINEERING TECHNOLOGY

Accounting
Administration of Justice
Automotive Technology
Building Construction
Business (General)
Business Information Technology
Computer Information Systems
Culinary Arts
Electricity
Electronics
Engineering
Design Technology
Fire Technology
Hospitality

Machine Shop
Manufacturing and Industrial Technology
Marketing
Paralegal
Statistics
Technical Education (General)
Welding

COMMUNITY EDUCATION CENTER

Cosmetology (Noncredit Division)

COUNSELING

Counseling

ENGLISH

English

HEALTH SCIENCES

Anesthesia Technology
Dental Assisting
Dental Hygiene
Dental Laboratory Technology
Emergency Medical Technology
Gerontology
Medical Assisting
Nutrition
Nursing
Personal Care Assistant
Radiologic Technology

KINESIOLOGY, HEALTH and ATHLETICS

Health Education
Kinesiology – Activity
Kinesiology – Theory
Kinesiology – Intercollegiate Athletics

LANGUAGES

American Sign Language
Arabic
Armenian
Chinese
English as a Second Language
Foreign Language Study
French
German
Italian
Japanese
Latin
Linguistics
Portuguese
Russian
Spanish

LIBRARY

Library

MATHEMATICS and COMPUTER SCIENCE

- Computer Science
- Mathematics
- Statistics

NATURAL SCIENCES

- Anatomy
- Astronomy
- Biology
- Chemistry
- Environmental Studies
- Geography
- Geology
- Microbiology
- Physical Science
- Physics
- Physiology

PERFORMING and COMMUNICATION ARTS

- Communication
- Dance
- Music
- Popular Music
- Speech Communication
- Speech Language Pathology Assistant
- Television and Radio
- Theater Arts

SOCIAL SCIENCES

- American Institutions
- Anthropology
- Child Development
- Economics
- Education
- Global Studies
- History
- Humanities
- Philosophy
- Political Science
- Psychology
- Religious Studies
- Social Sciences
- Sociology
- Special Education Technology
- Statistics

SPECIAL SERVICES

- Special Services

VISUAL ARTS and MEDIA STUDIES

- Architecture
- Art
- Cinema
- Communication

- Design/Media Arts
- Fashion
- Graphic Communications Technology
- Journalism
- Photography
- Theater Arts

ACCOUNTING

(Business and Engineering Technology Division)

ACCT 001A FINANCIAL ACCOUNTING

5 units

Prerequisite: *Eligibility for MATH 131.*

Recommended Preparation: *ACCT 010 or BUS 014A.*

Study of the concepts and techniques for measurement and communication of financial information and interpretation of financial statements. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ACCT 110*

Grade Mode: L, A

ACCT 001B MANAGERIAL ACCOUNTING

4 units

Prerequisite: *ACCT 001A.*

Principles of managerial accounting. The use of accounting information in decision-making, planning, directing operations and controlling. Focuses on cost terms and concepts, cost behavior, cost structure and cost-volume-profit analysis. Includes issues relating to cost systems, cost control, profit planning, and performance analysis in manufacturing and service environments. Total of 72 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ACCT 120*

Grade Mode: L

ACCT 010 BOOKKEEPING — ACCOUNTING

4 units

Basic accounting principles and methods of recording business transactions, maintaining a general ledger system, and preparing financial statements. Emphasis on service and merchandising systems for sole proprietorships. **No credit** if taken after ACCT 001A or ACCT 101. **For** preparation for ACCT 001A and office support, marketing-merchandising majors and those who want a knowledge of bookkeeping for personal use, but open to all qualified students. Total of 72 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

ACCT 104A COMPUTERIZED ACCOUNTING - QUICKBOOKS

3 units

Prerequisite: *ACCT 001A or 010.*

Introduction to accounting systems concepts and software with PC packages such as Quickbooks. Topics include gen-

**Course Identification Numbering System (C-ID)*

eral ledger, accounts payable, accounts receivable, inventory, and basic payroll. Total of 54 hours lecture and 18 hours laboratory.

Grade Mode: L

ACCT 104B PAYROLL ACCOUNTING

3 units

Recommended Preparation: *Enrollment in or completion of ACCT 104A.*

Concepts of payroll accounting, including microcomputer application. The course is based on the curriculum for the Fundamental Payroll Certification provided by the American Payroll Association. Total of 54 hours lecture and 18 hours laboratory.

Grade Mode: L, A, P

ACCT 104C INCOME TAX PREPARATION

3 units

Introduction to federal and California individual tax preparation. The curriculum follows the guidelines developed by the California Tax Education Council. Total of 54 hours lecture and 18 hours laboratory.

Grade Mode: L

ACCT 106A VOLUNTEER INCOME TAX ASSISTANCE (VITA) TRAINING

2 units

Preparation for the IRS and California Franchise Tax Board Volunteer Income Tax Assistance Program (VITA). Introduction to federal and California individual tax preparation using the guidelines developed by the IRS. The VITA program certification exam will be administered during this course. Total of 36 hours lecture.

Grade Mode: P

ACCT 108A VOLUNTEER INCOME TAX ASSISTANCE (VITA) 1 unit

Prerequisite: *ACCT 106A or the equivalent.*

Preparation of tax returns for low-income and elderly taxpayers according to the Volunteer Income Tax Assistance (VITA) program guidelines. Students must be VITA certified in order to enroll. **Pass/No Pass grading.** Total of 54 hours laboratory.

Grade Mode: P

ADMINISTRATION OF JUSTICE

(Business and Engineering Technology Division)

AJ 010 INTRODUCTION TO THE ADMINISTRATION OF JUSTICE

3 units

History and philosophy of administration of justice in the United States of America from its inception to its role in a culturally diverse society. Identification and explanation of the various components of the criminal justice system; theories of crime, punishment and rehabilitation; examination of the contemporaneous hiring processes of law enforcement agencies, including but not limited to preparation of the application, oral board analysis and overall examination of the system requirements. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: AJ 110*

Grade Mode: L, A

AJ 012 CONCEPTS OF CRIMINAL LAW

3 units

Prerequisite: *Enrollment in or completion of AJ 010.*

Historical development of criminal law; legal research methods; classification of crime through critical thinking analysis as seen through the eyes of the investigator and the trier of fact; in-depth analysis of homicide and related crimes against persons; survey of property crimes and drug and alcohol related offenses; thorough exposure to legal concepts for those considering careers in law enforcement and related legal professions. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: AJ 120*

Grade Mode: L, A

AJ 014 LEGAL ASPECTS OF EVIDENCE

3 units

Prerequisites: *AJ 010 and 012.*

Origin, development, philosophy and constitutional basis of evidence; constitutional and procedural considerations affecting arrest, search and seizure; kinds and degrees of evidence and rules governing admissibility; judicial decisions interpreting individual rights and case studies; evidentiary requirements justifying the use of force or deadly weapons by peace officers. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: AJ 124*

Grade Mode: L, A

AJ 016 PRINCIPLES AND PROCEDURES OF THE JUSTICE SYSTEM

3 units

Prerequisites: *AJ 010 and 012.*

Structure, jurisdiction and procedures of different courts; functions of various administrative agencies; criminal procedures from apprehension to conviction, including bail, extradition, search and seizure, examination, modes of accusation, appeals and writs. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: AJ 122*

Grade Mode: L, A

**Course Identification Numbering System (C-ID)*

AJ 018 COMMUNITY RELATIONS

3 units

Prerequisite: AJ 010.

Survey of the relationships of the criminal justice system and the community; symptomatic aspects of community mistrust, lack of cooperation and misunderstanding. The process of interaction between the criminal justice practitioner and the citizen. Analysis of how relationships are developed, maintained and changed. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: AJ 160*

Grade Mode: L, A

AJ 019 PRINCIPLES OF INVESTIGATION

3 units

Prerequisites: AJ 010 and 012.

Basic principles of all types of investigations utilized in the United States justice system. Includes human interactions in dealing with the public, specific knowledge necessary for handling crime scenes; interviews, evidence, surveillance, follow-up, technical resources and case preparation. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: AJ 140*

Grade Mode: L, A

AJ 022 CONCEPTS OF ENFORCEMENT SERVICES

3 units

Prerequisite: AJ 012.

Theories, philosophies and concepts related to the role expectations of the enforcement officer. Emphasis on patrol, and public service responsibilities and their relationship to the administration of justice system. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

AJ 122 FIELD PRACTICE IN ADMINISTRATION OF JUSTICE

2 units

Prerequisite: AJ 012 and maintain enrollment in 7 units or more including field practice.

Supervised field experience or employment in Administration of Justice, on-the-job training with local criminal justice agency. Student must meet all requirements of participating agency. **Pass/no pass** grading. Total of 180 hours laboratory.

Grade Mode: A, P

AJ 128 USE OF FORCE

1 unit

Prerequisite: AJ 010.

Methods required for the use-of-force in the law enforcement

field. Preparation for taking law enforcement self-defense test. Protection against persons armed with dangerous and deadly weapons. Demonstration and drill in limited number of holds and come alongs. Restraint of prisoners and mentally ill persons. Use of baton and application of self-defense kicks and handcuffing techniques. Total of 9 hours lecture and 27 hours laboratory.

Grade Mode: L, A

AJ 130 FIREARMS

1 unit

Prerequisite: AJ 014.

Moral aspects, legal provisions, safety precautions and restrictions covering use of firearms; firing of sidearms and shotguns; various chemical agents (gases); and training-related first aid. Total of 9 hours lecture and 27 hours laboratory.

Grade Mode: L

AJ 185 HOMELAND SECURITY

3 units

Prerequisites: AJ 010 and AJ 012.

History, ideology, and tactics used by foreign and domestic terrorist organizations. The United States response to the terrorist threat, countermeasures to prevent or mitigate and recover from acts of terrorism. Case studies of previous terrorist attacks; a working knowledge of weapons of mass destruction; a study of the religious, social, and political paradigms which motivate global terrorism and the impact on American law enforcement. Total of 54 hours lecture.

Grade Mode: L, A

AJ 190 INTRODUCTION TO FORENSICS

3 units

Prerequisites: AJ 010 and AJ 012.

Basic concepts and overview of the Forensic Science field. Topics include terminology, crime scene processing protocols and techniques, types of evidence, lab techniques available for the recovery of fingerprints, fingerprint identification, an overview of criminalistics, and of specializations within the discipline. **Required** instructional trips. Total of 54 hours lecture.

Grade Mode: L, A

AMERICAN INSTITUTIONS

(Social Sciences Division)

AMER 125 AMERICAN INSTITUTIONS

3 units

Constitution of United States; American history, including American institutions and ideals; principles of state and local government established under California constitution;

**Course Identification Numbering System (C-ID)*

present-day applications and interpretation. **No credit** if taken after Amer 005 or Pols 001. Total of 54 hours lecture.

Grade Mode: L, A, P

AMERICAN SIGN LANGUAGE

(Languages Division)

ASL 001 ELEMENTARY AMERICAN SIGN LANGUAGE

4 units

Basic study of American Sign Language as used by Deaf individuals; development of receptive and expressive skills. Introduction to Deaf culture. **Maximum credit** for ASL 010A and ASL 001 is 4 units. Total of 72 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

ASL 002 ELEMENTARY AMERICAN SIGN LANGUAGE

4 units

Prerequisite: ASL 001.

Continuation of American Sign Language with an emphasis on receptive and expressive skills, signing parameters, spatial locations, classifiers, and lexicalized fingerspelling; vocabulary acquisition with practice; Deaf culture and customs. **Maximum credit** for ASL 010B and ASL 002 is 4 units. Total of 72 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ASL 003 INTERMEDIATE AMERICAN SIGN LANGUAGE

4 units

Prerequisite: ASL 002.

Intermediate American Sign Language with emphasis on basic conversation through receptive and expressive skills, signing parameters, spatial locations, classifiers, and lexicalized fingerspelling; vocabulary acquisition with practice; Deaf culture and customs. **Maximum credit** for ASL 010C and ASL 003 is 4 units. Total of 72 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, P

ASL 004 INTERMEDIATE AMERICAN SIGN LANGUAGE – LEVEL 2

4 units

Prerequisite: ASL 003.

A continuation of intermediate American Sign Language with emphasis on conversation skills and storytelling; continued expansion of knowledge of Deaf culture and Deaf community. **Maximum credit** for ASL 010D and ASL 004 is 4 units. Total of 72 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, P

ASL 015 INTRODUCTION TO DEAF CULTURE

3 units

Investigation of Deaf Culture. Emphasis on historical events that have impacted members of the Deaf community. Explores American Sign Language; addresses the diversity and cultural identity of members of the Deaf community in America. For students interested in understanding Deaf culture. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, P

ASL 109 FINGERSPELLING

1 unit

Principles of fingerspelling. Emphasis on receptive and expressive skills, including the proper handshape, clarity, speed, smoothness and correct English spelling. Total of 18 hours lecture.

Grade Mode: L, A, P

ASL 110 METHODS OF COMMUNICATION — HEARING IMPAIRED

3 units

Methods of communication with the K-12 hearing impaired student and the application of these methods for the para-professional working in the classroom setting. Total of 54 hours lecture.

Grade Mode: L, A, P

ANATOMY

(Natural Sciences Division)

ANAT 025 HUMAN ANATOMY

4 units

Recommended Preparation: Completion of any college-level (1-99) course in the Natural Sciences.

Study of structural organization of the human body from cellular to organ system level of organization. Gross and microscopic anatomy of the integumentary, skeletal, muscular, nervous, sensory, endocrine, cardiovascular, lymphatic, respiratory, digestive, excretory, and reproductive systems of the human body. Total of 36 hours lecture and 108 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: BIOL 110B.*

Grade Mode: L, P

ANAT 110 DISSECTION ANATOMY

2 units

Prerequisite: ANAT 025.

Study of gross anatomy by dissection of a human cadaver with emphasis on musculature and neurovascular supply of extremities and organs of the thoracic and abdominal cavities. Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: L, A, P

*Course Identification Numbering System (C-ID)

**ANAT 115 HEAD AND NECK ANATOMY,
HISTOLOGY AND EMBRYOLOGY**

3 units

Prerequisites: ANAT 025 and PYSO 001 or PYSO 002A and PYSO 002B and enrollment in Dental Hygiene program.

Anatomy, histology and embryology of the head and neck with emphasis on the structures of the oral cavity. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A, P

ANESTHESIA TECHNOLOGY

(Health Sciences Division)

**AT 110 PROFESSIONAL ASPECTS OF ANESTHESIA
TECHNOLOGY**

2 units

Corequisite: AT 111.

Enrollment Limitation: Enrollment in the Anesthesia Technology Program.

Introduction to Anesthesiology's contribution to quality patient care and the relationship of the Anesthesia Technologist to other Healthcare professionals. Focus is on patient safety, universal precautions, and student safety in the Healthcare environment. Total of 36 hours lecture.

Grade Mode: L, A

**AT 111 BASIC PRINCIPLES OF ANESTHESIA
TECHNOLOGY**

3 units

Corequisite: AT 110.

Enrollment Limitation: Enrollment in the Anesthesia Technology Program.

Introduction to the theory and concepts of functioning in a surgical environment including a fundamental understanding of a variety of anesthesia equipment and basic case set-up utilizing anesthesia supplies and equipment. Total of 54 hours lecture.

Grade Mode: L, A

**AT 112 ADVANCED PRINCIPLES OF ANESTHESIA
TECHNOLOGY**

3 units

Prerequisite: AT 111.

Corequisites: AT 113, 114, 116.

Enrollment Limitation: Enrollment in the Anesthesia Technology Program.

Introduction to the theory and concepts of the use and function of anesthesia supplies and equipment used for various surgical procedures to include cases in: General, regional, and conscious sedation. Total of 54 hours lecture.

Grade Mode: L, A

AT 113 ANESTHESIA PHARMACOLOGY

3 units

Prerequisites: AT 110 and 111.

Corequisites: AT 112, 114, 116.

Enrollment Limitation: Enrollment in the Anesthesia Technology Program.

Introduction to the theory and concepts in the proper use and safe practice of delivery and storage of anesthesia medications which includes: Stocking of the drug cart and assisting anesthesia care provider in the preparation of medications. Total of 54 hours lecture.

Grade Mode: L, A

**AT 114 BASIC ANESTHESIA EQUIPMENT-THEORY
AND LAB**

3 units

Prerequisite: AT 111.

Corequisites: AT 112, 113, 116.

Enrollment Limitation: Enrollment in the Anesthesia Technology Program.

Introduction to the theories and concepts in the adequate function of anesthesia equipment to include, maintaining equipment, repairing defects and trouble-shooting complications. Total of 54 hours lecture and 45 hours laboratory.

Grade Mode: L, A

**AT 115 ADVANCED ANESTHESIA
EQUIPMENT-THEORY AND LAB**

3 units

Prerequisite: AT 114.

Corequisites: AT 117, 118.

Enrollment Limitation: Enrollment in the Anesthesia Technology Program.

Introduction to the theory and concepts of advanced anesthesia equipment used in cardiac, neurological, and trauma anesthesia. Total of 54 hours lecture and 45 hours laboratory.

Grade Mode: L, A

**AT 116 ANESTHESIA TECHNOLOGY CLINICAL
EXPERIENCE I**

5 units

Prerequisite: AT 111.

Corequisites: AT 112, 113, 114.

Enrollment Limitation: Enrollment in the Anesthesia Technology Program.

Introduction to the theory and concepts of clinical practice in Obstetrical, Pediatric, and Outpatient anesthesia to include: General, regional and conscious sedation techniques. Total of 270 hours laboratory.

Grade Mode: L, A

AT 117 ANESTHESIA TECHNOLOGY CLINICAL EXPERIENCE II

5 units

Prerequisite: AT 116.

Corequisites: AT 115, 118.

Enrollment Limitation: *Enrollment in the Anesthesia Technology Program.*

Introduction to the theory and concepts of advanced clinical practice skills. Students operate independently as anesthesia technologists in all aspects of patient care including: preoperative, intraoperative, and postoperative surgical phases. Total of 270 hours laboratory.

Grade Mode: L, A

AT 118 ANESTHESIA TECHNOLOGY CASE STUDY AND PROGRAM REVIEW

3 units

Prerequisite: AT 116.

Corequisites: AT 115 and, 117.

Enrollment Limitation: *Enrollment in the Anesthesia Technology Program.*

Capstone course utilizing theory and concepts of the clinical practicum for demonstrating safe and effective anesthesia care for all surgical patients to include: preoperative, intraoperative, and postoperative management. Total of 54 hours lecture.

Grade Mode: L, A

ANTHROPOLOGY

(Social Sciences Division)

ANTH 001 PHYSICAL ANTHROPOLOGY

3 units

Explore the field of physical anthropology, emphasizing the evolution of the human species. Topics include human heredity, mechanisms of human change, human variation, and the reconstruction of human evolutionary history through examination of the fossil record and comparative studies of our closest biological relatives, the living apes. **No credit** if taken after ANTH 001H. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ANTH 110*

Grade Mode: L, A, P

ANTH 001H HONORS PHYSICAL ANTHROPOLOGY

3 units

Enrollment Limitation: *Acceptance into the Honors program.*

Explore the field of physical anthropology, emphasizing the evolution of the human species. Topics include human heredity, mechanisms of human change, human variation,

and the reconstruction of human evolutionary history through examination of the fossil record and comparative studies of our closest biological relatives, the living apes. This enriched course is designed for the Honors Program allowing more student-directed discussions and more extensive writing assignments. **No credit** if taken after ANTH 001. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ANTH 110*

Grade Mode: L, A, P

ANTH 001L LABORATORY IN PHYSICAL ANTHROPOLOGY

1 unit

Prerequisite: *Enrollment in or completion of ANTH 001.*

Laboratory to explore selected topics in physical anthropology including genetics human variation, the living primates, and human paleontology. Total of 54 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: ANTH 115L*

Grade Mode: L, A, P

ANTH 002 CULTURAL ANTHROPOLOGY

3 units

Origin, development and extensiveness of socio-economic groups such as tribe, clan and family; religious phenomena such as ritual, belief and worship; language phenomena and thought processes. **No credit** if taken after ANTH 002H. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ANTH 120*

Grade Mode: L, A, P

ANTH 002H HONORS CULTURAL ANTHROPOLOGY

3 units

Enrollment Limitation: *Acceptance into the Honors program.*

Origin, development and extensiveness of socio-economic groups such as tribe, clan and family; religious phenomena such as ritual, belief and worship; language phenomena and thought processes. This enriched course is designed for the Honors Program allowing more student-directed discussions and more extensive writing assignments. **No credit** if taken after ANTH 002. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ANTH 120*

Grade Mode: L, A, P

ANTH 003 INTRODUCTION TO ARCHAEOLOGY

3 units

Methods, theories and practices of archaeology. An exploratory survey of how archaeologists discover, describe, interpret, and explain the past through the analysis of material remains left by ancient peoples. Topics include the history and interdisciplinary nature of archaeology; field methods, analytical practices, and dating techniques; categories of archaeological evidence; professional ethics;

*Course Identification Numbering System (C-ID)

and selected cultural sequences and archaeology site examples. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ANTH 150*

Grade Mode: L, A, P

ANTH 004 ANTHROPOLOGY OF RELIGION, MAGIC, WITCHCRAFT

3 units

An introduction to anthropology through analysis of the origins and development of supernatural beliefs from pre-historic people to contemporary societies using archaeological examples, cross-cultural ethnographic studies. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ANTH 005 INTRODUCTION TO LINGUISTIC ANTHROPOLOGY

3 units

Overview of human languages, their unique nature, characteristics, the varied social and cultural uses of language, the ways culture and communication mutually influence each other, including language socialization, social variation in language use and cross cultural communication. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ANTH 130*

Grade Mode: L, A, P

ANTH 006 ORIGINS OF CIVILIZATION

3 units

Introduction to the origins and development of human culture, from the beginning of tool use to the rise of civilization and the origins of the modern state. An archaeological exploration of some of the most prominent ancient sites and civilizations from both the Old and New Worlds. Topics include early tool use, the domestication of plants and animals, the emergence of metallurgy, advent of writing, early village life, and rise of complex social and political systems (civilizations). Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ANTH 007 ARCHAEOLOGICAL ARTIFACT ANALYSIS

3 units

Recommended Preparation: Enrollment in or completion of ANTH 003.

An introduction to the concepts and techniques used by archaeologists to examine varied types of archaeological materials. Basic instruction in artifact handling, identification, classification, cataloging, analysis, and curation. Total of 45 hours lecture and 27 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ANTH 009 GENDER, SEX AND CULTURE

3 units

Explores the anthropology of sex and gender including the relationship between biology and culture in human evolution, archaeological evidence of gender distinctions in pre-history, cross-cultural constructions of masculinity, femininity, and sexuality, variations in sexual division of labor and economic stratification, gender differences in religion and family, and the impact of gender issues in the contemporary global culture. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

ANTH 012 AMERICAN INDIAN CULTURES

3 units

Introduction to the societies and cultures of Native North America, their beliefs and behaviors. Topics include social organization, marriage and kinship, subsistence strategies, political organization and cultural change. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ANTH 020 INDEPENDENT STUDY

1 unit

Prerequisite: ANTH 001 or ANTH 002.

Individual research project; emphasis on field work or on library research techniques; written reports. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

ANTH 030A-I ANTHROPOLOGICAL FIELD STUDIES

2 units

Prerequisite: Enrollment in or completion of ANTH 001, 002, 003 or 004.

Field investigation of the regional cultures and cultural artifacts in selected areas of the world. **Required** instructional trips (an average of two hours each week). **Each** course 2 units; total of 18 hours lecture, 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

- ANTH 030A MESA VERDE, COLORADO
- ANTH 030B RIO GRANDE PUEBLOS, NEW MEXICO
- ANTH 030C CALIFORNIA
- ANTH 030D ROCKY MOUNTAINS
- ANTH 030E ENGLAND
- ANTH 030F ITALY
- ANTH 030G SOUTHERN CALIFORNIA
- ANTH 030I BAJA CALIFORNIA

*Course Identification Numbering System (C-ID)

ANTH 031 MEXICAN AND CHICANO CULTURE

3 units

Analysis of Mexican-American culture and society; religion, political interests, economy, customs, institutions; cultural adaptation of the Mexican-American to the dominant culture. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ANTH 040 APPLICATIONS OF ARCHAEOLOGICAL FIELD WORK

2 units

Beginning field experience in archaeology. Basic techniques of archaeological field work, including survey and excavation; field artifact identification and collection; and site mapping and recordation. **Required** instructional trips (for a minimum of two hours per week). **No credit** if taken after ANTH 030H. Total of 18 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, P

ANTH 110 SKILLS FOR COLLEGE SUCCESS IN ANTHROPOLOGY

1 unit

Development of essential study techniques for success in anthropology courses; orientation to applications of computer-based technology in anthropology; time management; textbook mastery, lecture outlining, test taking, and critical analysis. Total of 18 hours lecture.

Grade Mode: L, A, P

ANTH 140 ADVANCED APPLICATIONS OF ARCHAEOLOGICAL FIELD WORK

2 units

Prerequisite: ANTH 040.

Advanced field experience in archaeology. Continued instruction in the methodologies and techniques used in archaeological fieldwork. Enhanced exposure to site survey, excavation, mapping, and recordation techniques; field crew supervision; report writing; and select field projects. **Required** instructional trips (for a minimum of two hours per week). Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: L, P

ARABIC

(Languages Division)

ARBC 001 ELEMENTARY ARABIC

5 units

Pronunciation and grammar, practical vocabulary, useful phrases; reading, writing and speaking. Introduction to

geography, customs and culture of Arabic-speaking people. Corresponds to first year of high school Arabic. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ARBC 002 ELEMENTARY ARABIC

5 units

Prerequisite: ARBC 001, or the first year of high school Arabic, or placement based on the foreign language assessment process.

Grammar, oral training, written composition and reading of elementary Arabic texts; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ARCHITECTURE

(Visual Arts and Media Studies Division)

ARCH 010A ARCHITECTURAL DESIGN FUNDAMENTALS

3 units

Corequisite: ARCH 012A.

Recommended preparation: Enrollment in or completion of ARCH 011.

Introduction to formal visual principles through design exercises. Emphasis on developing creativity and effectiveness in communicating a comprehensive design concept. Analysis of the built environment focusing on the interaction between art and architecture and their environment. Application of investigation techniques and ideas to the analysis of built form focusing on the connection between built form and its meaning. Execution of projects using a variety of communication skills including: traditional drawing, model making, computer illustration and digital imaging. **Required** field trips. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ARCH 010B DESIGN FUNDAMENTALS

3 units

Prerequisites: All of the following: ARCH 010A, ARCH 011, ARCH 012A.

Corequisite: ARCH 012B.

Application of three-dimensional design principles to the execution of simple architectural projects. Emphasis on developing a structured architectural design process that will lead to solutions that are firmly based on concepts. Field trips for active research and exploration of project sites. Study and application of abstract architectural theo-

ries of three-dimensional form, space, order, program and site in design projects. **Required** field trips. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ARCH 011 INTRODUCTION TO ARCHITECTURE

2 units

An exploration of architectural education and the design professions through topics such as design, drawing, contemporary philosophies of design, and theory. A study of the past, present, and future of the architectural profession and an examination of various related design professions including landscape architecture, interior design, industrial design, city planning, and urban design. Survey of the various roles these designers play in effecting the built environment as individuals and how they interrelate as a design team. Observation of significant architectural examples will present architecture as a unified expression of an architect's dream. **Required** field trips. Total of 36 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

ARCH 012A VISUAL COMMUNICATIONS I

3 units

Corequisite: ARCH 010A.

Recommended Preparation: Enrollment in or completion of ARCH 011.

Development of two- and three-dimensional drawing concepts, principles and techniques using mechanical and digital methods. Critically examine an iconic work of architecture through hand drawn orthographic parallel and perspective drawings as well as state of the art two-dimensional CAD drawing and three-dimensional digital modeling and rendering. Study of presentation types and how they can be utilized to communicate architectural ideas using state of the art digital imaging/illustration/composition software. Development of skill sets required in corresponding design studio courses. **Required** field trips. Total of 18 hours lecture and 108 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ARCH 012B VISUAL COMMUNICATIONS II

3 units

Prerequisite: ARCH 010A and 012A.

Corequisite: ARCH 010B.

Development of advanced digital communications representation techniques using state of the art computer software including: two-dimensional drawing, three-dimensional digital model building, digital rendering and digital imaging/illustration/composition. A critical examination of iconic architecture using conceptual and analytical three-dimensional diagramming of architectural systems,

concepts and theory. Development of skill sets required in design studio courses. **Required** field trips. Total of 18 hours lecture and 108 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ARCH 013 ARCHITECTURAL PORTFOLIO PREPARATION

3 units

Prerequisites: ARCH 010B and 012B.

A study of advanced individual student architectural design projects for portfolio preparation. Development of individual student portfolios which emphasize student accomplishments, instructional objectives and unique portfolio content required by different accredited schools of architecture. Subsequent portfolio development for interviews in industry. Exploration and analysis of portfolio presentation principles and techniques. Development of digital portfolios using computer illustration, photo imaging and page layout programs. Evaluation of printing and binding techniques. **Maximum credit** for ARCH 013 and ARCH 100 is 3 units. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ARCH 014 MATERIALS AND PROCESSES OF CONSTRUCTION

2 units

Recommended preparation: Enrollment in or completion of ARCH 020A.

Hands on exploration of materials and methods of construction, properties, assembly and fabrication of basic construction materials as they relate to building design. Examination of historic and contemporary architecture focusing on building materials and structural systems as they relate to design concepts. Review of the basic types of governmental regulatory constraints that architects must understand to design a building. Analysis of the basic structural forces that operate on buildings. In depth examination of the sequential processes of construction of a building. **Required** field trips. Total of 18 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ARCH 020A ARCHITECTURAL DESIGN

6 units

Prerequisites: ARCH 010B and ARCH 012B.

Recommended Preparation: Enrollment in or completion of ARCH 014.

Exploration and development of concepts through architectural issues such as site, circulation, program, building structure and enclosure. Critical examination of architectural issues and ideas discussed in the context of student

projects in the design studio. Application of critical structural and building material knowledge to architectural design projects. **Required** field trips. Total of 54 hours lecture and 162 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ARCH 020B ARCHITECTURAL DESIGN

6 units

Prerequisites: ARCH 014 and ARCH 020A.

Development of principles and processes of architecture through more complex architectural design projects. Exploration of complex programmatic relationships through concepts. Comparative analysis of a broad range of architectural building types as they relate to student design projects. Examination of sustainability and environmental issues of climate and lighting and how these issues can be addressed as integral components of an architectural design solution. Field trips for active exploration of project sites. **Required** field trips. Total of 54 hours lecture and 162 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ARCH 022A ARCHITECTURAL PRACTICE

5 units

Architectural drafting conventions. Relationship of drawings and their functions, schedules and related detail drawings. Preparation of working drawings for a wood frame building involving light framing and heavy timber construction. Total of 54 hours lecture and 108 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ARCH 022B ARCHITECTURAL PRACTICE

5 units

Prerequisite: ARCH 022A.

Continuation of architectural drafting involving more complex structural systems and materials. Preparation of working drawings for a structure involving steel reinforced concrete and unit masonry materials. Emphasis is on detailing. Total of 54 hours lecture and 108 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ARCH 024A HISTORY OF ARCHITECTURE

3 units

Development of architecture from Prehistory, through ancient Egypt, ancient Greece and ancient Rome to the end of the Medieval period. Development of ancient, traditional or indigenous architecture of India, Islam, China, Japan, Africa, and the Americas. Influence of geography, religion

and socio-economic factors on architecture. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

ARCH 024B HISTORY OF ARCHITECTURE

3 units

Basis and development of modern architecture from the Renaissance to the present day. Influence of technological, ecological, environmental, and socio-economic factors on architecture. Trends in contemporary architecture and environmental design. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

ARMENIAN

(Languages Division)

ARMN 001 ELEMENTARY ARMENIAN

5 units

Pronunciation, reading, speaking and writing; customs and culture. Corresponds to first year of high school Armenian. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ARMN 002 ELEMENTARY ARMENIAN

5 units

Prerequisite: ARMN 001, or the first year of high school Armenian, or placement based on the foreign language assessment process.

Continuation of grammar essentials; practice in reading, speaking and writing Armenian; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ART

(Visual Arts and Media Studies Division)

Art courses are frequently required, regardless of transferability, in order to develop an acceptable portfolio necessary for admission to selective four-year college art programs.

ART 001A HISTORY OF WESTERN ART - PREHISTORIC THROUGH MEDIEVAL

3 units

Survey of the history of architecture, sculpture, painting and the minor arts representative of prehistoric, ancient, classical and medieval periods of Western civilizations. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, P

ART 001B HISTORY OF WESTERN ART**3 units**

Survey of the history of architecture, sculpture, painting and the minor arts from Renaissance to present day in Western civilizations. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ARTH 120*

Grade Mode: L, A, P

**ART 001C ARTS OF AFRICA, OCEANIA, AND
INDIGENOUS NORTH AMERICA****3 units**

Survey of art, architecture, and visual culture within select regions in Africa, Oceania, and indigenous North America. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ARTH 140*

Grade Mode: L, P

ART 003A HISTORY OF ASIAN ART**3 units**

Architecture, sculpture, painting and minor arts of India and Southeast Asia; includes religious and philosophical influences on art forms. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ART 003B HISTORY OF ASIAN ART**3 units**

Architecture, sculpture, painting and the minor arts of China, Korea and Japan; includes religious and philosophical influences on art forms. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ART 004A HISTORY OF ANCIENT ART IN THE WEST**3 units**

A survey of the history of Western and Ancient Near Eastern architecture, sculpture, painting and the minor arts from prehistoric times through the fifth century A.D. Includes prehistoric, Mesopotamian, Egyptian, Aegean, Greek, Hellenistic and Roman art. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ART 004B HISTORY OF EUROPEAN MEDIEVAL ART**3 units**

A survey of the history of architecture, sculpture, painting and the minor arts from the fifth century A.D. through the 13th century A.D. Includes Early Christian, Byzantine, Islamic, Carolingian, Ottonian, Romanesque and Gothic art. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

**ART 004C HISTORY OF EUROPEAN RENAISSANCE
AND BAROQUE ART****3 units**

A survey of the history of architecture, sculpture, painting and the minor arts in Western Europe from the 13th century through the early 18th century. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ART 004D HISTORY OF MODERN ART**3 units**

Recommended Preparation: Enrollment in or completion of ENGL 001A.

A survey of the history of modern art that provides an overview of art and architecture from the late 18th century through the 19th and 20th centuries. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ARTH 150*

Grade Mode: L, A, P

ART 005 ART FUNDAMENTALS**3 units**

A general art appreciation survey that offers a broad introduction to works of art through the study of theory, terminology, themes, design principles, media and the history of the visual arts across time and diverse cultures. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ARTH 100*

Grade Mode: L, A, P

ART 007 PRE-COLUMBIAN ART**3 units**

A survey of the major monuments of sculpture, architecture, painting and the minor arts of Mesoamerica and the Andean region of western South America from ca. 2000 B.C. until the Conquest. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

ART 008 HISTORY OF MEXICAN AND CHICANO ART**3 units**

A survey of Mexican art from its beginning to the present. Includes pre-Columbian, colonial and modern art in Mexico as well as contemporary Mexican-American expression. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ART 009 HISTORY OF ISLAMIC ART**3 units**

A survey of the history of art and architecture of the Islamic world from its beginnings in the seventh century

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through the eighteenth century. Total of 54 hours lecture.
Transfer Credit: CSU; UC

Grade Mode: L, A, P

ART 011A FOUNDATION DRAWING

3 units

Introduction to principles, elements, and practices of drawing, employing a wide range of subject matter and drawing media. Focus on perceptually based drawing, observational skills, technical abilities, and creative responses to materials and subject matter. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: ARTS 110*

Grade Mode: L, A, P

ART 011B INTERMEDIATE DRAWING

3 units

Prerequisite: ART 011A.

Exploration of artistic concepts, styles, and creative expression related to intermediate level drawing, focusing on complex subject matter and concepts using a variety of drawing mediums, techniques, and methodologies. Students will build on fundamental drawing skills to develop personalized approaches to content and materials in exercises covering multiple historical and contemporary approaches to drawing. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: ARTS 205*

Grade Mode: L

ART 011C PORTFOLIO DEVELOPMENT OF DRAWING

3 units

Prerequisite: ART 011B.

To develop an advanced portfolio of drawings using techniques and concepts learned for previous art experiences. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 012A BEGINNING LIFE DRAWING

3 units

Prerequisite: ART 011A or placement based on the art assessment process.

Drawing the human figure from observation using a wide variety of drawing media and techniques. Descriptive and interpretative approaches to drawing the figure. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: ARTS 200*

Grade Mode: L, A

ART 012B LIFE DRAWING

3 units

Prerequisite: ART 012A.

Continued study in drawing from the human figure from

direct observation. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ART 013 FOUNDATION PRINTMAKING

3 units

Introduction to the various methods of making two-dimensional art works in multiple printed forms. Making of printing elements for the production of original works on paper or other substrates for the purpose of visual communication and dialogue. Screen-print, monotype, lithograph, intaglio and relief process. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ART 015 SKETCHING FOR DESIGN

3 units

Introduction to quick sketching techniques for beginning design and illustration students utilizing a variety of media including pencil, pen, markers and a variety of papers. Emphasis on developing visual communication skills for advertising, graphics, illustration, jewelry, product and interior design. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 016 PERSPECTIVE

3 units

Beginning elements of one-and/or two-point perspective utilizing the grid and freehand methods. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ART 018 RENDERING

3 units

Recommended preparation: ART 015.

Graphic visualization for convincing representation emphasizing contemporary presentation techniques with markers, chalk and pencil. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 020 INDEPENDENT STUDY

2 units

Prerequisites: Completion of art specialty sequence or enrollment in last course of sequence and permission of department chairperson.

Individual projects in art. Total of 108 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

**Course Identification Numbering System (C-ID)*

ART 020A BEGINNING PAINTING**3 units****Prerequisite:** *Enrollment in or completion of ART 011A.*

Introduction to principles, elements, and practices of painting. Focus on exploration of painting materials, perceptual skills and color theory, paint mixing and technique, as well as creative responses to materials and subject matter. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. C-ID: ARTS 210***Grade Mode:** L, A, P**ART 020B PAINTING****3 units****Prerequisite:** *ART 020A.*

Development of experimental and intuitive approaches to still life, landscape, figurative subject matter. Emphasis on abstract theories. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***Grade Mode:** L, A**ART 020C PAINTING****3 units****Prerequisite:** *ART 020B.*

Exploration of advanced concepts and ideas. Emphasis on composition and color and a variety of materials and techniques. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***Grade Mode:** L, A**ART 021 PAINTING****3 units****Prerequisite:** *ART 020C or placement based on the art assessment process.*

Experimentation with traditional and contemporary methods of painting. Composition, interpretation and expression using figure, still life and landscape. See department chairperson. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***Grade Mode:** L, A**ART 022A WATERCOLOR PAINTING****3 units****Prerequisite:** *Enrollment in or completion of ART 011A or placement based on the art assessment process.*

Introduction to the fundamentals of watercolor painting. Emphasis on the basic techniques and principles of painting. See department chairperson. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***Grade Mode:** L, A**ART 022B WATERCOLOR PAINTING****3 units****Prerequisite:** *ART 022A.*

Advanced techniques and experimental uses of watercolor painting. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***Grade Mode:** L, A**ART 022C WATERCOLOR PAINTING****3 units****Prerequisite:** *ART 022B.*

Individualized, project-based continued exploration of technical and aesthetic aspects of watercolor painting. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***Grade Mode:** L, A**ART 023A PRINTMAKING — INTAGLIO AND RELIEF****3 units**

Basic intaglio and relief fine art printing processes. Introduction to wood and linoleum cut, drypoint, etching, and color printing techniques. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***Grade Mode:** L, A**ART 023B PRINTMAKING — LITHOGRAPHY****3 units**

Basic black and white and color hand lithographic printing from plate and stone. Introduction to direct drawing with dry and liquid materials, transfer, and photo-lithographic techniques. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***Grade Mode:** L, A**ART 023C PRINTMAKING — MONOTYPE****3 units**

Exploration of printing unique images using a variety of painterly and direct drawing techniques on plexiglass and metal plates. Introduction to stencil, viscosity, texture, and transfer methods. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***Grade Mode:** L, A**ART 024 PRINTMAKING — SILK SCREEN****3 units**

Basic fine art screen printing incorporating paper stencils, screen filler, drawing fluid, and photographic emulsion. Introduction to edition and monoprinting techniques with an emphasis on color printing. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC***Grade Mode:** L, A

*Course Identification Numbering System (C-ID)

ART 025 BEGINNING SCULPTURE

3 units

An introduction to materials, methods and techniques with an emphasis on the development of ideas and personal expression. Materials include clay, plaster, cement, wood utilized for both carving and construction, metal, plastics and mixed media including video and other digital technologies. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ART 026 SCULPTURE

3 units

Prerequisite: ART 025.

Expansion of Art 025 with emphasis on discovering the medium that best relates to the student's individual expression. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ART 027 SCULPTURE TECHNOLOGY — METAL CASTING AND MOLD MAKING

3 units

Prerequisite: ART 025.

Sculpture methods and techniques in bronze, aluminum casting and mold making. Work in wax, mixed media for direct casting and drop casting. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 028 FIGURE SCULPTURE

3 units

A study and exploration of the basic principles, materials and techniques in dealing with expressive contemporary solutions to figure sculpture. **Recommended** ART 025. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ART 031A COLOR AND COMPOSITION — TWO DIMENSIONAL DESIGN

3 units

Introduction to the concepts, applications, and historical references related to two-dimensional art and composition, including the study of the basic principles and elements of line, shape, texture, value, color and spatial illusion. Development of a visual vocabulary for creative expression through lecture presentations, studio projects, problem solving, and written assignments. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: ARTS 100*

Grade Mode: L, A

ART 031B COLOR THEORY

3 units

Prerequisite: ART 031A.

A study of the principles, theories, and applications of additive and subtractive color in two dimensions. Topics will include major historical and contemporary color systems, cultural usage, and the perception of color. Explore and apply color theories in the development and application of design elements and principles in two-dimensional compositions. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: ARTS 270*

Grade Mode: L, A

ART 032A DESIGN — THREE DIMENSIONAL

3 units

Introduction to the concepts, applications, and historical references related to three-dimensional design and spatial composition, including the study of the elements and organizing principles of design as they apply to three-dimensional space and form. Development of a visual vocabulary for creative expression through lecture presentations and use of appropriate materials for non-representational three-dimensional studio projects. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: ARTS 101*

Grade Mode: L, A

ART 033A PRODUCT DESIGN — APPLICATION

3 units

Introduction to the product design profession. Students create hands-on projects with emphasis on innovation, design methodologies, social and environmental issues, consumer trends, sketching and presentation techniques. Completion of the course results in portfolio projects. Overview of the industrial design professions which include product, transportation, environmental and entertainment design. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 033B PRODUCT DESIGN — APPLICATION

3 units

Prerequisite: ART 033A.

Continued study in application of three-dimensional design to industry with emphasis on product development. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 033C PRODUCT DESIGN — APPLICATION

3 units

Prerequisite: ART 033B.

Emphasis on corporate product and graphic planning; development of student portfolio. Total of 36 hours lecture

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and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 034A APPLIED DESIGN I – MATERIALS AND PROCESSES

3 units

Recommended Preparation: ART 031A.

Introduction to traditional and contemporary concepts and processes in a variety of design media such as metal, wood/fiber, and glass/plexiglass. Emphasis is on design principles in the development of aesthetic forms based on function. Geared towards students with an interest in jewelry, product design, interior design, and sculpture. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU. *C-ID: ARTS 280*

Grade Mode: L

ART 034B APPLIED DESIGN II – MATERIALS AND PROCESSES

3 units

Prerequisite: ART 034A.

Intermediate experiences and research in wood, glass, and metal. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 036A JEWELRY/METAL FABRICATION

3 units

Introduction to a wide range of methods, techniques, and material to create jewelry and small scale artwork and objects. Includes the study of historical and contemporary practices of jewelry-making, small metal casting, and fabrication with a global cultural perspective. Work with aluminum, titanium, copper, brass and silver; creative combination of materials and basic stone setting. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 036B JEWELRY/METAL FABRICATION

3 units

Prerequisite: ART 036A.

Expressive use of metal techniques. Study of hollow jewelry construction using nonferrous metals. Simple faceted stone setting. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 036C JEWELRY CASTING

3 units

Prerequisite: ART 036B.

Creative use of mold casting techniques. Basic and exploratory techniques in jewelry casting using non-ferrous metals and lost wax casting techniques. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 038A CERAMICS

3 units

Introduction to ceramic materials, and processes including basic design principles, creative development, hand-building, throwing, glaze techniques, firing and ceramic terminology. The course covers aesthetics and creative development of clay objects examining historical, contemporary, and personal modes of expression across cultures. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ART 038B CERAMICS

3 units

Prerequisite: ART 038A.

Expressive use of ceramic techniques. Individual experimentation in clay forms; experience in firing. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ART 038C CERAMICS

3 units

Prerequisite: ART 038B.

Individual projects integrating the aesthetics of materials and ideas as may be considered in utilitarian and sculptural ware. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ART 038D CERAMICS

3 units

Prerequisite: ART 038C.

Advanced projects in ceramics, integrating multiple techniques used to produce a cohesive body of work. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ART 039A HANDBUILT CERAMICS

3 units

Introduction to ceramic materials, and processes including basic design principles, creative development, hand-building, throwing, glaze techniques, firing and ceramic terminology. The course covers aesthetics and creative development of clay objects examining historical, contemporary, and personal modes of expression across

cultures. Total of 36 hours lecture and 72 hours laboratory.
Transfer Credit: CSU; UC
Grade Mode: L, A, P

ART 039B HANDBUILT CERAMICS

3 units

Prerequisite: ART 039A.

Experimental approaches in the development of handbuilt ceramic forms. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ART 039C HANDBUILT CERAMICS

3 units

Prerequisite: ART 039B.

Individual projects in handbuilt ceramics focusing on the development of personal aesthetics. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ART 039D HANDBUILT CERAMICS

3 units

Prerequisite: ART 039C.

Advanced projects in ceramics, integrating multiple hand-building techniques used to produce a cohesive body of work. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ART 040 INTRODUCTION TO DIGITAL ARTS

3 units

Introduction to the computer as an effective visual communication design, production and presentation tool. Familiarity with current design software, hardware, input, and output devices will be established. Design assignments integrate digital tools, techniques, concept development, and creative design and composition using text and image. Survey of the application options of digital skills to contemporary media, art, and design in visual communications industries. Foundational digital design class for Art, Design, Media Journalism, Photography, and classes requiring presentations. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 041A INTERIOR DESIGN: SPACE PLANNING AND MATERIALS I

3 units

Recommended Preparation: Enrollment in or completion of ART 032A.

An introduction to the design of interior spaces through study of space planning, and an understanding of historical interior styles, materials and furnishings. Emphasis placed on application of principles and elements of design in three-dimensional space, ranging from domestic to small commercial projects. Design communication and visualization skills are developed using hand drawings and model building. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 041B INTERIOR DESIGN: SPACE PLANNING AND MATERIALS II

3 units

Prerequisite: ART 041A.

Recommended Preparation: Enrollment in or completion of DT 008A.

Intermediate course in Interior Design. Emphasis on space planning, and selection, use, and detailing of materials. Design communication and visualization skills are developed using hand drawings and model building. Total of 36 hours lecture and 72 hours of laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 041C INTERIOR DESIGN: SPACE PLANNING AND MATERIALS III

3 units

Prerequisite: ART 041B.

Recommended Preparation: DT 008A.

Emphasis on space planning for commercial and institutional interiors, and the selection, use, and detailing of materials and furniture. Design communication and visualization skills are developed using hand drawings and model building. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 050A INTRODUCTION TO ADVERTISING GRAPHIC DESIGN

3 units

Prerequisite: ART 031A.

Recommended preparation: ART 015, ART 040.

Introduction to the fields of graphic design & advertising. Concept development, the creative design process, production, and presentation techniques through the development of design projects on various media. Design and production skills including beginning computer software skills. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 050B INTERMEDIATE ADVERTISING/GRAPHIC DESIGN

3 units

Prerequisite: ART 050A.

Recommended preparation: ART 040.

Intermediate studies of the theories and techniques in the fields of graphic design & advertising. Principles of concept and design development are combined with the use of computer design and production tools. Projects are produced for various media like: brochures, magazines, ePubs, posters, corporate ID, branding, advertising, and packaging design. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 050C ADVANCED ADVERTISING/GRAPHIC DESIGN

3 units

Prerequisite: ART 050B.

Advanced studies in the fields of graphic design & advertising and portfolio development. Projects, including a portfolio, are developed for use in seeking employment or application to a university or professional school. Emphasis is on advanced concepts and presentation techniques and the application of visual communication concepts to print and digital media. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 051A TYPOGRAPHY – LETTERING

3 units

Recommended preparation: ART 031A.

Introduction to the fundamentals of typographic lettering through the study of historic and contemporary fonts, calligraphic, and hand-drawn typographic forms and systems. Emphasis is on developing conceptual, design, compositional, and hand drawing skills, in order to gain skill in producing logotypes, fonts and custom typographic lettering to for the needs of graphic design and advertising industries. Students will learn a variety of traditional analogue and contemporary digital techniques and materials. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 051B TYPOGRAPHY – APPLICATION

3 units

Recommended Preparation: ART 031A, ART 051A, ART 050A.

Intermediate studies in the application of typography, and the creation and application of custom logotypes, fonts, and

typographic lettering to creative visual communications design projects in the graphic design and advertising industries. Emphasis is on concept development, design, production, and presentation of artwork using both traditional and contemporary digital methods. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 052A INTRODUCTION TO ILLUSTRATION

3 units

Prerequisite: ART 011A.

Recommended Preparation: ART 031A.

A study of the common techniques and media used in various illustration fields. Emphasis on problem solving by creating illustrations from specific themes. Projects will apply to the areas of print, entertainment, and galleries. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 052B ADVANCED ILLUSTRATION

3 units

Prerequisite: ART 052A.

Recommended Preparation: ART 031A.

Refinement of media and techniques with an emphasis towards developing experimental uses. Emphasis on advanced problem solving by creating illustrations from abstract and personal themes. Projects will serve as portfolio pieces for specific illustration areas. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 056 INTRODUCTION TO DIGITAL PAINTING & DRAWING

3 units

Introduction to fundamental concepts, practices, and theories of digital art production. Topics include integration of traditional design, and compositional principles with contemporary digital tools. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: ARTS 250*

Grade Mode: L, P

ART 057 MOTION GRAPHICS

3 units

Exploration of experimental and new technological approaches to creating original 2D and 3D time-based visual imagery for use in design, fine arts, animation, and interactive media. Introduction to the integration of sound, graphics, video, and text. Exploration of motion design and dynamic storytelling to create movies, animation, and professional special effects for digital output. **No credit** if

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taken after ART 156. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

ART 059 CREATIVE CODING FOR THE INTERNET

3 units

Exploration of the creative potential of computer programming for the Internet using JavaScript, its use, and cultural implications in the context of art and design. Fundamentals of programming (variables, conditionals, iteration, functions, and objects). Covers generative drawing, 3D graphics, sound, and virtual reality in a variety of design projects specifically for web-based and mobile output. Geared toward students who would like to explore computer programming in an art and design context. **No credit** if taken after ART 158. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

ART 060 CREATIVE CODING

3 units

Prerequisite: ART 056 or ART 040 or PHOT 030 or portfolio of intermediate computer skills with experience in computer graphics or digital video or music.

Exploration of the creative potential of computer programming using Processing and Java. Teaches the use, and cultural implications of code in the context of art and design. Fundamentals of programming (variables, conditionals, iteration, functions, and objects). Covers generative drawing, image processing, 3D graphics, data parsing, computer vision in a variety of art and design-oriented projects, media outputs and fabrications. For students who would like to explore computer programming in an art and design context. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

ART 061 CREATIVE CODING FOR MOBILE DEVICES

3 units

Exploration of the creative potential of computer programming for mobile devices using Apple's Swift programming language. Teaches the use and cultural implications of code in the context of art and design. Fundamentals of programming (variables, conditionals, iteration, functions, and objects). Covers touch-based interfaces, generative drawing, image processing, 3D graphics, data parsing, computer vision in a variety of art and design-oriented projects, media outputs and fabrications. Geared toward students who would like to explore computer programming in an art and design context. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

ART 062 PHYSICAL COMPUTING FOR ART & DESIGN

3 units

Prerequisites: ART 056 or ART 040 or PHOT 030 or portfolio of intermediate computer skills with experience in computer graphics or digital video or music.

Explores the creative potentials in the field of physical computing for artists and designers. Explores innovative ways to create installations, interactive products, designs and sculptures that combine electronics, sensors and motors to generate unique experiences. Students will work individually and in teams to wireframe, prototype and produce interactive objects while learning the basic principles of electronics as they apply to art-making. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

ART 063 USER EXPERIENCE DESIGN (UX)

3.5 units

Focuses on the quality of experience a person has when interacting with a specific design. A UX Designer focuses on the needs and wants of the user, as well as ease-of-use, and designs for the best possible user experience. Covers the design process, documentation, and tools used within the UX field. Topics include user research, information architecture, interaction design, prototyping, and usability testing. Following a design process, students will collaborate to research, critique, and design a project that includes prototyping and user-testing. Total of 54 hours lecture and 36 hours laboratory.

Transfer Credit: CSU

Grade Mode: L

ART 064 INTRODUCTION TO INTERACTION DESIGN

3 units

Introduction to human-computer interaction, interface design, and interactive and time-based media for designers. Overview of foundational interaction design concepts such as human factors, perception, cognition, research techniques, and design methods for the design of user experiences & interaction. A survey of interactive products, systems, interfaces and technology (software and hardware), constraints and trajectories for future developments and how these frame Interaction Design and production. Workflow, planning and organization of prototyping in Interaction Design. Recommended knowledge of digital imaging. **No credit** if taken after ART 154. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

ART 070 PRINCIPLES OF ANIMATION

3 units

Prerequisite: ART 056 or portfolio of intermediate computer skills with experience in computer graphics or digital video or music.

Fundamental principles of animation. Study of the basic theory and mechanics of the discipline. Development of simple animation using principles such as squash and stretch, overlap and anticipation. Fundamentals of character design, storyboarding, visual storytelling, and layout. Techniques such as stop-motion, onionskin, follow-through and rotoscoping using industry-standard computer animation applications. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ART 075 EXHIBITION AND PRESENTATION OF VISUAL ART

3 units

Recommended Preparation: *Previous art-related coursework and demonstrated ability to produce art independently are strongly recommended. Also, satisfactory completion of (or simultaneous enrollment in) English 001A or an equivalent English composition course is recommended.*

Development of individual art practices and preparation for transfer or professional applications through public exhibitions of art. Presentations of exhibitions in the campus art gallery or another site, in consultation with the instructor. Includes writing about art, visual documentation, professional installation practices and in-class critique. Class meetings may also include field trips or meetings with artists, gallery directors and other art professionals. This course is best suited to students who have already created a body of work that they wish to exhibit. Work in any medium is accepted. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 080 FOUNDATIONS OF INTERACTIVE GAME DESIGN

3 units

Surveys history, technology, narrative, ethics, and design of interactive computer games. Work in teams to develop novel game-design story boards. Exploration of the interplay of narrative, graphics, rule systems, and artificial intelligence in the creation of interactive games. Total of 54 hours lecture and 36 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ART 081 GAME DESIGN WITH GAME ENGINES

3 units

Prerequisites: *ART 080 or portfolio of intermediate computer skills with experience in computer graphics or digital video or music.*

Provides students with intermediate skills in video game design and development using a 2D and 3D game engine. Students create projects for 2D, 3D and in virtual reality.

Utilizing a design sequence that involves brainstorming techniques, team work, game design documents, prototyping and playtesting, students develop a knowledge of project management for an efficient and effective game design workflow. Topics include game rules, balance, complexity, randomness, narrative, player interaction, aesthetics and world building. Course includes basic scripting skills for game development. Course instruction utilizes workshops, lectures, class presentations and readings. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L

ART 085A 3D MODELING & SCULPTING

3 units

Covers three-dimensional modeling, sculpting, rendering, 3D Printing using industry-standard tools and methods. Topics include modeling with polygons, modeling with NURBs surfaces, materials, textures, lighting, and rendering. Principles of digital sculpting and methods to optimize projects for 2D and 3D printing. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

ART 085B 3D ANIMATION & SIMULATIONS

3 units

Introduction to time-based three-dimensional design and dynamic simulations. Animation, motion graphics, and dynamic effects using industry-standard tools and methods. Topics include basic rigging, animation, camera motions, paint effects, procedural animation, and dynamic simulations. Methods for post-production and output to video. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

ART 098 WEB DESIGN & DEVELOPMENT

3 units

Covers design and creation of websites. Exploration of usability, interface, navigation, and information design as well as creation of dynamic content in websites. Use of HTML, CSS, CMS's, and PHP/MySQL to explore simple to complex interactive projects for the Web. Creation of a professional website designed in an interdisciplinary team environment. Emphasis on project management and conceptual skills that comprise well-designed websites; an interdisciplinary course. **No credit** if taken after ART 198. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

ART 106 ART SINCE 1945**3 units**

A survey of major developments in 20th century European and American art since the Second World War. Total of 54 hours lecture.

Grade Mode: L, A, P**ART 118 ADVANCED RENDERING****3 units****Prerequisite:** ART 018.

Advanced graphic visualization for convincing representation emphasizing advanced presentation techniques and styles by use of marker, pencil, chalk and guache. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A**ART 135 PORTFOLIO DEVELOPMENT OF JEWELRY AND METAL FABRICATION****3 units****Prerequisite:** ART 036C.

To develop and advanced portfolio of metalwork and jewelry utilizing metal fabrication, lost wax cast, and setting techniques. Exploring advanced project techniques such as conceptual and design research and planning, safe studio practices, and execution of jewelry. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A**ART 145 PORTFOLIO DEVELOPMENT AND CRITIQUE****3 units**

Development of individual art practice through production of new original work (in any medium), a written artist's statement, and group discussion of art, texts, professional practices and preparation for transfer. May also include field trips or meetings with visiting art professionals. Students are expected to initiate self-defined projects, to execute them outside of class and to present this work for in-class critique. Previous art-related coursework and demonstrated ability to produce art independently are highly recommended. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A**ART 180 DIGITAL MEDIA INCUBATOR****3 units**

Prerequisite: Portfolio of intermediate to advanced computer skills with experience in computer graphics and/or digital video, music, computer programming, animation, gaming and media arts.

Identifying, pitching, developing and producing a student-lead, team-based, interdisciplinary digital media project. Exploring strategies for self-production and project promotion. Exposure to mentorship and professional feedback through invited guest critics. Collaborative and

professional creative-studio setting. Total of 54 hours lecture and 18 hours laboratory.

Grade Mode: L, A**ASTRONOMY****(Natural Sciences Division)****ASTR 001 ELEMENTARY ASTRONOMY****4 units****Prerequisites:** MATH 131.

Methods of investigation used by astronomers. Positional and practical astronomy, dynamical astronomy and modern astro-physics. Use of instruments, techniques of observation. **Night lab** occasionally substitutes for a lecture period. Total of 54 hours lecture and 36 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, P**ASTR 012 DESCRIPTIVE INTRODUCTION TO ASTRONOMY****3 units**

Recommended preparation: MATH 125 or MATH 127B or MATH 128B.

Origin, characteristics and evolution of the solar system, the stars, the galaxies and the universe. **No credit** if taken after GEOL 016 or ASTR 001. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A**ASTR 020 INDEPENDENT STUDY****1 unit**

Recommended Preparation: Enrollment in or completion of any college-level (1-99) course in the Natural Sciences.

Enrollment Limitation: Permission of Dean.

Faculty-guided independent study of a topic in Astronomy. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, P**AUTOMOTIVE TECHNOLOGY****(Business and Engineering Technology Division)****AUTO 100 BASIC AUTOMOTIVE FUNDAMENTALS****2 units**

Vocabulary and theory of the internal combustion engine. Covers major vehicle operating systems including ignition, fuel, transmission, driveline, chassis, suspension, brakes, heating, and air conditioning. **Recommended** for Automotive Program students that have no experience and/or did not attend a High School automotive program. This is the only Automotive Technology course that has no

DMV or uniform requirement. **No credit** if taken after AUTO 032. Total of 36 hours lecture.

Grade Mode: L, A, P

AUTO 101C AUTOMOTIVE SERVICE CONSULTANT

3 units

Prerequisites: ENGL 001A and AUTO 100.

Enrollment Limitations: *Must possess a valid driver's license. DMV print out showing valid driver's license is required. Must be able to stand for long periods of time. Typing skills necessary.*

Organization and function of an automotive service consultant. Development of effective Walk-around inspection skills. Use BAR and California standards to create a legal service repair order. This course prepares students for the ASE C1 certification exam. Valid driver's license required. Total of 54 hours of lecture and 9 hours of laboratory.

Grade Mode: L, A

AUTO 140A VEHICLE MAINTENANCE

4 units

Prerequisites: Enrollment in or completion of ENGL 400 and MATH 402.

This course is intended for the incumbent worker, re-entry personal, and/or persons seeking a career change into the automotive service industry. It is the foundation course in the Maintenance and Light Repair (MLR) Program. Course focuses on developing workplace skills (detailed multi-point inspection and fluid maintenance) on select vehicle subsystems. Appropriate lab activities are included. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L, A

AUTO 141 ENGINE MECHANICAL MAINTENANCE AND LIGHT REPAIR

2 units

Prerequisite: AUTO 140A or one year industry experience.

Intended for the incumbent worker, re-entry personal, and/or persons seeking a career change into the automotive service industry. Part of the Maintenance and Light Repair (MLR) program. Essential engine theory, inspection, diagnosis, service and repair. Engine inspection and measurements with an emphasis on in-vehicle repairs. Total of 27 hours lecture and 27 hours laboratory.

Grade Mode: L, A

AUTO 144 AUTOMOTIVE CHASSIS MAINTENANCE AND LIGHT REPAIR

4 units

Prerequisite: AUTO 140A.

Intended for the incumbent worker, re-entry personal, and/or persons seeking a career change into the automotive service industry. Part of the Maintenance and Light Repair (MLR) program. Essential chassis system theory, inspection, diagnosis, service and repair of the following undercar systems: steering, suspension, alignment, wheels

and tires. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L, A

AUTO 145 AUTOMOTIVE BRAKES MAINTENANCE AND LIGHT REPAIR

3 units

Prerequisite: AUTO 140A.

Intended for the incumbent worker, re-entry person or person seeking a career change into the automotive service industry. This course is part of the Maintenance and Light Repair (MLR) curriculum. This course is focused on developing workplace skills that will allow a student to competently perform detailed brake inspections and repairs on disc, drum and parking brake systems. Appropriate lab activities are included. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A

AUTO 146 AUTOMOTIVE ELECTRICAL SYSTEMS MAINTENANCE AND LIGHT REPAIR

4 units

Prerequisite: AUTO 140A.

Intended for the incumbent worker, re-entry personal, and/or persons seeking a career change into the automotive service industry. Part of the Maintenance and Light Repair (MLR) program. Essential electrical and electronic systems theory, including inspection, diagnosis, service and repair of specific electrical systems (battery, starting systems, charging systems, lighting systems, gauges, instrument-panel warning lights and power accessories). Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L, A

AUTO 147 AUTOMOTIVE HEATING, VENTILATION AND AIR CONDITIONING MAINTENANCE AND LIGHT REPAIR

2 units

Prerequisite: AUTO 140A.

Intended for the incumbent worker, re-entry personal, and/or persons seeking a career change into the automotive service industry. Part of the Maintenance and Light Repair (MLR) program. Essential heating, ventilation, and air conditioning (HVAC) system theory, inspection, maintenance and light repair. Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: L, A

AUTO 148 ENGINE PERFORMANCE MAINTENANCE AND LIGHT REPAIR

4 units

Prerequisite: AUTO 140A.

Intended for the incumbent worker, re-entry person or person seeking a career change into the automotive service industry. Part of the Maintenance and Light Repair (MLR) curriculum. Essential engine management system theory, along with inspection, diagnosis, service and repair

of the following systems: Ignition, air and fuel delivery, electronic engine controls, and auxiliary emission controls. Total of 54 hours of lecture and 54 hours laboratory.
Grade Mode: L, A

AUTO 170 WORK EXPERIENCE INTERNSHIP

4 units

Enrollment Limitation: 40 or more units in AUTO courses. DMV license in good standing (no points).

Supervised unpaid work experience in an established professional Dealership or Independent repair facility. Designed for students accomplishing the All Automotive Systems Certificate to assist in employment transition. Analysis of professional and technical style and performance outcomes. Occupational Work Experience Education: This work experience course of supervised employment is designed to assist students to acquire career awareness, work habits, attitudes and skills related to the student's college major. Credit may be accrued at the rate of 1 to 8 units per semester for a total of 16 units. Additionally, students must work 60 non-paid hours per unit earned. Total of 240 hours field practice.

Grade Mode: L, A, P

AUTO 200 AUTOMOTIVE FUNDAMENTALS FOR TECHNICIANS

4 units

Recommended Preparation: AUTO 100 or AUTO 032 if no previous experience with vehicles.

Enrollment Limitation: Valid DMV license (print out)

Introductory course intended for automotive majors and individuals with some automotive knowledge or experience. Automobiles will be covered from the service technician's view covering all roles and responsibilities as recommended by BAR, NATEF, and all Federal and State agencies. Theories and fundamentals of the automobile's major operating systems including: internal combustion engine, ignition, fuel, driveline, chassis, suspension, brakes, heating and air conditioning. Lab activities in automotive inspection and maintenance service are included. 54 lecture hours and 54 laboratory hours.

Grade Mode: L, A

AUTO 201 ENGINE OPERATION & TESTING

6 units

Prerequisite: AUTO 200.

Enrollment Limitation: Able to manipulate up to 50 lbs. in a safe manner. Work at an average 4 foot working height. Technical course with hands-on experience related to automotive engine theory of operation and methods of testing. Extensive practice in using pinpoint testing to diagnose failures. Practice in disassembly measurement and reassembly of various four cycle engines. Use of precision measurement tools and assessing engine failure

conditions. **No credit** if taken after AUTO 220. Total of 54 hours lecture and 162 hours laboratory.

Grade Mode: L, A

AUTO 202 AUTOMATIC TRANSMISSION AND TRANSAXLES

5 units

Prerequisite: AUTO 200 and AUTO 206A; **or** AUTO 032 and AUTO 050; **or** AUTO 200 and AUTO 050

Enrollment Limitation: DMV print out showing valid driver's license is required. Must be able to stand for long periods of time and work on overhead automotive lifts at a height of 5 ft or more while standing. Must lift and manipulate 80 lbs or more in a safe manner.

Theory of operation and service of hydraulic and electronic controlled automatic transmissions/transaxles available in automobiles and light trucks. Laboratory procedures include disassembly, inspection, reassembly of a common hydraulic controlled automatic transmission. Safe and correct use of special service and diagnostic tools is emphasized. This course prepares student for A2 ASE Professional Exam. **No credit** if taken after AUTO 223. Total of 54 hours lecture and 108 hours laboratory.

*C-ID: AUTO 120X

Grade Mode: L, A

AUTO 203 MANUAL TRANSMISSION, TRANSAXLE, AND DRIVETRAIN

5 units

Prerequisite: AUTO 200.

Enrollment Limitation: Must possess a valid driver's license. DMV print out showing valid driver's license is required. Able to work in a standing position for long periods and manipulate 80 lbs. or more in a safe manner.

Theory of operation and diagnosis of manual transmissions, transaxles, clutches, differentials, driveshafts, constant velocity joints, and drive axles. Laboratory procedures include removal, disassembly, inspection, rebuilding, installation, and adjustment of manual transmissions and related assemblies. ASE A3 examination preparation. **No credit** if taken after AUTO 222. Total of 54 hours lecture and 108 hours laboratory.

*C-ID: AUTO 130X

Grade Mode: L, A

AUTO 204 AUTOMOTIVE SUSPENSION & STEERING

6 units

Prerequisite: Enrollment in or completion of AUTO 205.

Enrollment Limitation: Must possess a valid driver's license. DMV print out showing valid driver's license is required. Must be able to stand for long periods of time and work on cutting equipment at a height of 3 ft or more while standing. Must lift and manipulate 50 lbs or more in a safe manner.

Theory of operation, diagnosis, service and repair of suspension and steering systems. Wheel alignment on

*Course Identification Numbering System (C-ID)

Hunter and John Beam Equipment, tire service and repair, tire diagnosis including wheel balancing. This course pertains to the Snap-On Industrial Certification in Wheel Service which includes alignment. NATEF Tasks are the basis of all lab work and ASE Student Certification Exam is required in course. **No credit** if taken after AUTO 225. Total of 63 hours lecture and 135 hours laboratory.

*C-ID: AUTO 140X

Grade Mode: L, A

AUTO 205 AUTOMOTIVE BRAKE SYSTEMS

4 units

Prerequisite: AUTO 200 and AUTO 206A; **or** AUTO 032 and ELTN 130; **or** AUTO 200 and ELTN 130.

Enrollment Limitation: *Must possess a valid driver's license. DMV print out showing valid driver's license is required. Must be able to stand for long periods of time and work on cutting equipment at a height of 3 ft or more while standing. Must lift and manipulate 50 lbs. or more in a safe manner.*

Theory of operation, diagnosis, and repair of ABS systems using ABS scanners. Emphasis is placed on complete brake services including related machine operations. Prepares students for the ASE A5 exam, ASE Student Certification testing is completed in this class. **No credit** if taken after AUTO 224. Total of 36 hours lecture and 108 hours laboratory.

*C-ID: AUTO 150X

Grade Mode: L, A

AUTO 206A BASIC AUTOMOTIVE ELECTRICAL SYSTEMS

4 units

Enrollment Limitation: *Valid DMV license (printout) required.*

Fundamentals of electrical theory and how it is applied in modern vehicles. Understanding of basic automotive electrical systems: circuits and lights, electronic devices, starting motors, charging systems, batteries and indicating devices. Building of automotive circuits, testing and repair of DC automotive circuits. Introduction to reading schematics, and troubleshooting. First level course in the preparation for the Automotive Service Excellence (ASE) A6 certification program. **No credit** if taken after AUTO 050. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L, A

AUTO 206B AUTOMOTIVE ELECTRICAL SYSTEMS

4 units

Prerequisite: AUTO 200 and AUTO 206A; **or** AUTO 032 and AUTO 050; **or** AUTO 200 and AUTO 050.

Theory, operation, and maintenance of microprocessor-based automotive control systems. Electronic fuel injection ignition, body computer modules and on-board diagnostic systems are covered. Use of digital scan tools, oscilloscopes and trouble-shooting procedures are practiced. This course

prepares the student for the ASE A6 Electrical test. **No credit** if taken after AUTO 151. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L, A

AUTO 207 AUTOMOTIVE HEATING & AIR CONDITIONING

3 units

Prerequisite: AUTO 200 and AUTO 206A; **or** AUTO 032 and AUTO 050; **or** AUTO 200 and AUTO 050.

Enrollment Limitation: *Proof of valid DMV license required if working on vehicles in the Auto Facility.*

Air conditioning theory, methods of testing, diagnosing and servicing automotive air conditioners. Introduction to new technologies, safe handling, reclaiming and recycling of refrigerants. Students will have the opportunity to take the United States Clean Air Act MACS Section 609 Refrigerant Recycling and Recovery Certification Program to obtain a refrigerant handlers' license. This course prepares students for the Automotive Service Excellence (ASE) A7 Professional Exam. **No credit** if taken after AUTO 215. Total of 36 hours lecture and 54 hours laboratory.

*C-ID: AUTO 170X

Grade Mode: L, A

AUTO 208 ENGINE PERFORMANCE

6 units

Prerequisites: AUTO 201 and AUTO 206B.

Enrollment Limitations: *Must possess a valid driver's license. DMV print out showing valid driver's license is required. Must be able to stand for long periods of time.*

Theory and operation of electronic engine controls and includes: electronic fuel injection, electronic ignitions, onboard diagnostics and current emission systems. Laboratory practice includes proper setup and use of digital storage oscilloscopes, scan tools, engine analyzer, four and five-gas emission analyzers, and dynamometer. This course prepares the students for the Automotive Service Excellence (ASE) A8 Professional Exam. **No credit** if taken after AUTO 226 and 227 or 208A and 208B. Total of 72 hours lecture and 108 hours laboratory. **Formerly** 208A and 208B.

Grade Mode: L, A

AUTO 228 HYBRID AND ELECTRIC VEHICLE THEORY, OPERATION AND BASIC SERVICE

4 units

Prerequisite: AUTO 227.

Hybrid and electric vehicles. Theory of operation of high voltage systems, batteries, internal combustion engine, powertrain, and supporting systems. Testing of hybrid and electric vehicle systems utilizing industry standard diagnostic tools. Safety when working with high voltage assemblies, along with proper set-up and operation of diagnostic tools is emphasized. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L, A

*Course Identification Numbering System (C-ID)

BIOLOGY

(Natural Sciences Division)

BIOL 002 ANIMAL BIOLOGY

4 units

Major zoological principles, both invertebrate and vertebrate. Animal development, form and function, natural history and economic relationship to human society. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

BIOL 003 HUMAN BIOLOGY

4 units

Introduction to structures, functions and processes of the human body systems and diseases of those systems; human genetics and human evolution. Includes microscope work, and the study of models, computer applications and case studies. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

BIOL 004 PLANT BIOLOGY

4 units

Basic botanical principles; plant evolution and diversity, the cell, photosynthesis, respiration, reproduction, heredity, ecology, and importance of plants to humans. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

BIOL 005A TOPICS IN APPLIED BOTANY/URBAN TREE IDENTIFICATION & BIOLOGY

1 unit

Lecture, laboratory and field investigations focusing on topics of current and general interest in applied botany. Total of 9 hours lecture and 27 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A, P

BIOL 005B BOTANY FOR SCHOOL GARDENS

1 unit

Lecture, laboratory and field investigations focusing on topics of current and general interest in applied botany. Total of 9 hours lecture and 27 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A, P

BIOL 005C TOPICS IN APPLIED BIOLOGY - MEDICINAL PLANTS

1 unit

Lecture, laboratory and field investigations focusing on topics of current and general interest in applied botany.

Total of 9 hours of lecture and 27 hours of laboratory.

Transfer Credit: CSU

Grade Mode: L, A, P

BIOL 010A CELLULAR BIOLOGY, GENETICS AND EVOLUTION

5 units

Prerequisite: CHEM 001A.

Investigates the principles governing cell biology, metabolism, genetics, evolution and history of life on earth. The first course in a 3-course sequence for Biology majors (BIOL 010ABC). **For** majors in biological sciences but open to all qualified students. Total of 54 hours lecture and 108 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: BIOL 190; BIOL SEQ 130S (WITH BIOL 010B)*

Grade Mode: L, A, P

BIOL 010B THE DIVERSITY OF LIFE ON EARTH: STRUCTURE, FUNCTION AND ECOLOGY

5 units

Prerequisites: CHEM 001A and BIOL 010A.

Explores the diversity of living organisms, the structure and function governing their form and function, and the ecological principles that guide their interactions. Second in a 3-course series for Biology majors (BIOL 010ABC). Total of 54 hours lecture and 108 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: BIOL SEQ 130S (WITH BIOL 010A)*

Grade Mode: L, A

BIOL 010C GENETICS

3 units

Prerequisites: CHEM 001A and BIOL 010A.

Explores the details of genetics, genomic analysis, DNA technology, bioinformatics, stem cell biology, and cancer. The third course in the sequence for Biology majors (BIOL 010ABC). Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

BIOL 010F BIOLOGICAL RESEARCH METHODS

1 unit

Prerequisite: Permission of Division Dean.

This course provides training in discipline specific research methods within the biological sciences. It is intended to prepare students for work on independent projects which will be mentored by a faculty member. Students will learn how to develop a project, collect and record data, conduct and analyze experiments, and communicate their findings.

Recommended successful completion of any Natural Sciences course 001-099. Total of 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

*Course Identification Numbering System (C-ID)

BIOL 010L LEADERSHIP IN THE BIOLOGICAL SCIENCES

1 unit

Prerequisite: *Permission of Division Dean.*

Leadership skills and abilities, including communication, collaboration, critical thinking, and resourcefulness. Students will provide supplemental instruction to peers in the biological sciences. **Recommended** successful completion of specific Natural Sciences course (001-099) student will tutor. Total of 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

BIOL 010S BIOLOGY SEMINAR

1 unit

Prerequisite: *Permission of Division Dean.*

Readings, discussions, and papers focusing on topics of current and general interest in the sciences. Each special topics course will emphasize critical thinking skill and is intended for the advanced student. This course will give students an opportunity to explore a current intellectual topic in biology with a professor in a seminar setting. **Recommended** successful completion of any Natural Sciences course 001-099. Total of 18 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

BIOL 011 GENERAL BIOLOGY

4 units

Basic concepts of biology; the cell, nutrition, a survey of physiological systems, reproduction, heredity, development, diversity of organisms, evolution and environmental biology. **No credit** if taken after BIOL 001A, 002, 003, 004, 005, 010ABC, or 011H. **For** non-biology majors, but open to all qualified students. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

BIOL 011H HONORS GENERAL BIOLOGY

4 units

Enrollment Limitation: *Acceptance into the honors program.*

Basic concepts of biology, the cell, nutrition, a survey of physiological systems, reproduction, heredity, development, diversity of organisms, evolution and environmental biology. **No credit** if taken after BIOL 001A, 002, 003, 004, 005, 011 or 010ABC. **For** non-biology majors, but open to all qualified students. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

BIOL 014 FIELD BIOLOGY

4 units

Birds, mammals, amphibians, reptiles, trees and shrubs of Southern California. Identification, ecology methods of observing and recording. **Required** instructional trips. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

BIOL 016 MARINE BIOLOGY

4 units

Marine organisms and their relationship to such environmental factors as temperature, salinity, oxygen, minerals, ocean currents and depth; introduction to measurement of some of these factors. Collection and identification of marine organisms. Laboratory study of preserved specimens. **Required** instructional trips. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

BIOL 020 INDEPENDENT STUDY

1 unit

Recommended Preparation: *Enrollment in or completion of any college level (1-99) course in the Natural Sciences.*

Enrollment Limitation: *Permission of the Dean.*

Independent, faculty-guided student inquiry, project, research, laboratory experiment and/or field investigation. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

BIOL 025 FIELD STUDIES

1 unit

Investigations of biological organisms in their natural habitats with an emphasis on ecological relationships. **Required** instructional trips. Total of 54 hours by arrangement. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer Credit: CSU

Grade Mode: L, A, P

BIOL 026 BIOLOGY FIELD STUDIES

2 units

Investigations of animals and plants in their natural habitats with an emphasis on ecological relationships. **Required** instructional trips. Total of 18 hours lecture and 54 hours by arrangement. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer Credit: CSU

Grade Mode: L, A, P

BIOL 028 INTRODUCTION TO BIOINFORMATICS**3 units**

Introduction to the structure and function of proteins and nucleic acids including molecular modeling, sequence alignment, database management. Computer programming with Perl or comparable programming language. Designing and managing biological database using relational database applications. Data gathering and analysis using spreadsheet applications. **Recommended** basic computer skills. Total of 54 hours lecture and 36 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A, P

BIOL 030 FIELD BOTANY**4 units**

Collection, identification and classification of native California flowering plants. Field identification of trees, shrubs and wildflowers common in California plant communities. **Required** instructional trips. Total of 54 hours lecture and 54 hours by arrangement. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer Credit: CSU

Grade Mode: L, A, P

BIOL 038 CELL AND MOLECULAR BIOLOGY**4 units**

Prerequisites: CHEM 001A and BIOL 102C and one of the following: BIOL 002, 003, 004, 011 or MICR 002.

Theory of cell structure, types, chemistry and function. Lab procedures for the isolation, purification and analysis of cells, cell fractions and cell molecules. Particular attention given to the methods used in research, commercial and forensic labs. Total of 54 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

BIOL 039 MODERN HUMAN GENETICS**4 units**

An introductory course exploring the theoretical and practical applications of human heredity, genetics and biotechnology. Introduction to cellular and molecular biology, Mendelian and molecular genetics, evolution, human genetics, applications of genetic engineering including biotechnology, forensics and molecular medicine. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit limitation. See counselor.

Grade Mode: L, A, P

BIOL 071A EXPLORING TOPICS IN BIOLOGY**3 units**

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

BIOL 071B EXPLORING TOPICS IN BIOLOGY**1 unit**

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 18 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

BIOL 071C EXPLORING TOPICS IN BIOLOGY**1 unit**

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 18 hours lecture and 18 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

BIOL 102A BIOLOGICAL TECHNOLOGY - BASIC TECHNIQUES**3 units**

Prerequisite: BIOL 110.

Introduction to the fundamental skills and competencies necessary for working in a biotechnology laboratory. Basic skills include use and maintenance of standard laboratory equipment, solution and reagent preparation, sterile technique, quality control protocols, basic cloning procedures, production of an industry standard notebook, and laboratory safety. Course is taught in a laboratory setting allowing students to develop workplace competencies. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, P

BIOL 102B BIOLOGICAL TECHNOLOGY**3 units**

Prerequisite: BIOL 102A.

Advanced skills in applied biological technology. Skills include PAGE electrophoresis techniques, column chromatography, PCR, ELISA, lyophilization, DNA sequencing, and the production of an industry standard laboratory notebook. Internet databases will be used for instruction in bioinformatics. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A, P

BIOL 102C BIOLOGICAL TECHNOLOGY**3 units**

Prerequisite: BIOL 102A.

Advanced skills in applied biological technology. Skills include cell culture techniques for both plant and mammalian cell cultures and the production of an industry stan-

dard laboratory notebook. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A, P

**BIOL 102D BIOLOGICAL TECHNOLOGY -
LABORATORY INTERNSHIP**

3 units

Prerequisite: *BIOL 102B or BIOL 102C.*

Advanced skills in applied biological technology. Internship in a biochemistry laboratory. **Maximum credit** 12 units, 3 units each semester. Total of 234 hours laboratory.

Grade Mode: L, A, P

BIOL 103 BIOETHICS

3 units

Introduction to basic ethical principles through investigation of ethical issues resulting from scientific research and the development of emerging biotechnologies. Total of 54 hours lecture.

Grade Mode: L, A, P

**BIOL 104A APPLICATIONS OF FLUORESCENCE
MICROSCOPY**

2 units

Prerequisite: *BIOL 102C.*

Introduction to the fundamental principles of fluorescence microscopy. Exploration of specialized methods and practical biological applications of fluorescence detection and imaging using microscopy techniques currently being performed in research laboratories. Total of 18 hours lecture and 54 hours of laboratory.

Grade Mode: L, A, P

**BIOL 104B MICROBIOLOGICAL APPLICATIONS USED
IN BIOTECHNOLOGY**

4 units

Prerequisite: *BIOL 102B and BIOL 102C.*

Overview of the development of the field of molecular biotechnology. Instruction on how utilization of microorganisms and their biological products led to the advent of recombinant DNA technology, molecular cloning, and genetic engineering. Demonstration of various applied molecular microbiological techniques routinely performed in biotechnology laboratories. Total of 54 hours lecture and 72 hours laboratory.

Grade Mode: L, A, P

BIOL 104C RESEARCH METHODOLOGY

3 units

Prerequisites: *BIOL 102B and BIOL 102C and BIOL 038.*

Capstone course integrates the use of a variety of research methodologies taught in existing biotechnology core courses to illustrate the interdisciplinary nature of scientific research. Coursework includes participation in hypothesis-driven research projects focused on the use

of various gene regulatory mechanisms, including RNA interference and genome editing, to study the biology and function of mouse embryonic stem cells. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A, P

BIOL 104D COLLABORATIVE RESEARCH EXPERIENCE
3 units

Prerequisites: *BIOL 102B and BIOL 102C and BIOL 038.*

Opportunity to participate in scientific research projects in collaboration with a local research institute. Practical experience provided with basic research methodologies and strategies used in academic research, specifically in the field of stem cell biology. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

BIOL 110 INTRODUCTION TO BIOTECHNOLOGY
3 units

Research in the biotechnology industry and in academic research laboratories. Includes lectures on fundamentals of biotechnology combined with laboratory experiences to demonstrate research techniques, allowing an opportunity to explore various career pathways in the field of modern biotechnology. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, P

BIOL 171A EXPLORING TOPICS IN BIOLOGY
3 units

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total 54 hours lecture.

Grade Mode: L, A, P

BIOL 171B EXPLORING TOPICS IN BIOLOGY
1 unit

Exploratory course: *Specific topic identified in Schedule of Classes.*

Course focuses on topics of current and general interest. Total of 18 hours lecture.

Grade Mode: L, A, P

BIOL 171C EXPLORING TOPICS IN BIOLOGY
1 unit

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 18 hours lecture and 18 hours laboratory.

Grade Mode: L, A

BUILDING CONSTRUCTION

(Business and Engineering Technology Division)

BLDG 122 CONTRACTOR'S LICENSING

3 units

Rules and regulations of State Contractor's License Board; legal aspects of business. Total of 54 hours lecture.

Grade Mode: L, A

BLDG 151 CABINET AND MILLWORK FOR MODEL HOME CONSTRUCTION

4 units

Fabrication and installation of cabinets and millwork (door jambs, doors and moldings) for Model Home Construction projects. Safety instruction with hand and power tools in wood shop and at building site. Tools, processes and materials used in cabinetmaking and millwork. Basic blueprint reading, drawing, estimating and preparation of materials take-off list. Use of measurement, layout tools, laminates and lumber substitutes. Installation of cabinet and door hardware. Trade technical calculations. Related local and Uniform Building Codes and standards. Total of 36 hours lecture and 108 hours laboratory.

Grade Mode: L, A

BLDG 152A CABINETMAKING FOR THE STUDENT BUILT HOME CONSTRUCTION

4 units

Recommended Preparation: *BLDG 212, BLDG 220.*

Fabrication of cabinets (kitchen, bath and laundry, etc.) for student built home construction project. Safety instruction with hand pneumatic and power tools in shop and at building site. Tools, processes and materials used in cabinetmaking. Reading and understanding of working drawings for estimating and preparation of materials take-off. Use of measurement and layout tools, laminates and lumber substitutes. Trade technical calculations and related local and International Building Codes and standards and Title 24. Total of 36 hours lecture and 108 hours laboratory.

Grade Mode: L, A

BLDG 152B CABINET INSTALLATION & MILLWORK FOR HOME CONSTRUCTION

4 units

Prerequisite: *BLDG 152A.*

Recommended Preparation: *BLDG 212, BLDG 220.*

Installation of cabinets, hardware, interior door jambs, interior doors and mouldings for student built home construction projects. Safety instruction with hand, pneumatic and power tools in shop and at building site. Tools, processes and materials used in cabinet installation and millwork. Reading and understanding of working drawings

for estimating and preparation of materials take-off. Use of measurement, layout tools, laminates and lumber substitutes. Trade technical calculations. Related local and International Building Codes and Standards and Title 24. Total of 36 hours lecture and 108 hours laboratory.

Grade Mode: L, A

BLDG 210A-B BUILDING CONSTRUCTION

10 units

Prerequisite: *BLDG 210B requires BLDG 210A.*

Design and building of structures. Safety problems; blueprint reading, laying of foundations, building forms; concrete mixes and estimates of quantities; setting mud sills, girders, floor joists and plates; roughing in complete buildings, laying of bracing and bridging, laying of all rafters from blueprints. **Each course** 5 units, 10 hours. Total of 54 hours lecture and 126 hours laboratory.

Grade Mode: L, A

BLDG 212 PRINT READING FOR CONSTRUCTION

3 units

Review of basic drafting symbols as they appear on prints, analysis of multi-view and isometric drawings. Interpretation of working drawings, specifications and symbols on typical construction documents. Total of 54 hours lecture.

Grade Mode: L, A

BLDG 213 BUILDING CONSTRUCTION CODES AND STANDARDS

3 units

Codes and standards for building construction and design; fire protection features; shear paneling, steel hardware connections and design for earthquake mitigation; disabled accessibility design; reporting and clearance of asbestos containing materials (ACM); energy conservation. Total of 54 hours lecture.

Grade Mode: L, A

BLDG 214 MATERIALS AND PROCESSES OF CONSTRUCTION: SUB GRADE TO FLOOR FRAMING

3 units

Principles of engineering, structural plan reading, site layout, site grading, foundations, concrete construction, pre-stressed concrete, gunite. Disabled access design; earthquake mitigation design, reporting and clearance of asbestos containing materials (ACM) and other hazardous waste; energy conservation design. Total of 54 hours lecture.

Grade Mode: L, A

BLDG 215 MATERIALS AND METHODS OF CONSTRUCTION: FLOOR THROUGH ROOF FRAMING

3 units

Properties and erection of structural materials; lumber framing, structural metals, masonry and use of other materials. Insulation and glazing for energy conservation. Hardware and shear paneling for seismic reinforcement. Construction inspector's duties. Total of 54 hours lecture.

Grade Mode: L, A

BLDG 218 INSPECTION OF ARCHITECTURAL DETAILS

3 units

Properties of architectural materials, lumber, roofing, wall finishes, flooring and covering, glass and glazing, finishes. Engineering principles pertaining to heat, acoustics, humidity, roof construction, interior and exterior materials, finish carpentry, hardware and trim. Final inspection procedures. Total of 54 hours lecture.

Grade Mode: L, A

BLDG 219 LEGAL FACTORS OF CONSTRUCTION INSPECTION

3 units

Overview of the major elements of construction and inspection, laws, codes, and code enforcement processes. Understanding of the legal aspects of the code and the inspector's legal responsibilities, performance at hearings, and court procedures. Total of 54 hours lecture.

Grade Mode: L

BLDG 220 ESTIMATING FOR BUILDING CONSTRUCTION

3 units

Prerequisites: *BLDG 212 or BLDG 230A, or BLDG 210A & BLDG 210B.*

Theory of estimating; structure of plans and specifications estimates; quantity surveying; unit cost synthesis and analysis; bid organization and preparation; competitive simulations and exercises; the estimator's qualifications, responsibilities and ethics. Total of 54 hours lecture.

Grade Mode: L, A

BLDG 221 ELEMENTS OF GRADING INSPECTION

3 units

Earth moving operations: Site investigations, soil analysis and soil mechanics. Plan reading; review of soils, engineer's foundation inspection reports. Foundation and steel reinforcement inspection requirements. Hillside construction and inspection requirements. Total of 54 hours lecture.

Grade Mode: L, A

BLDG 222 PRINCIPLES OF HOUSING AND ZONING REQUIREMENTS

3 units

Purpose and intent of Zoning and Housing regulations. Land use, buildable areas, yards and allowable projections. History of parking requirements. Reading and interpretation of plans. Non-conforming rights, Code enforcement, Criminal Complaint Applications, Administrative Abatement of dangerous building and the appeal process. Total of 54 hours lecture.

Grade Mode: L, A

BLDG 223 PRINCIPLES OF PLUMBING INSPECTION

3 units

Plan reading and inspection for underground plumbing (water, gas, drains and vents); above-ground plumbing and venting; finished plumbing systems. The Uniform Plumbing Code enforcement process. Total of 54 hours lecture.

Grade Mode: L, A

BLDG 224 PRINCIPLES OF HEATING AND REFRIGERATION INSPECTIONS

3 units

Plan reading and inspection of heating, air conditioning, refrigeration and ventilation systems. Ducts, conductors, fuel supply, controls, insulation and refrigeration. The Uniform Mechanical Code enforcement process. Total of 54 hours lecture.

Grade Mode: L, A

BLDG 230A BUILDING CONSTRUCTION 10 units

Introduction of apprentice carpentry and the building construction trade. Safety orientation in the shop and on the job site including safety practices in demolition. Grading, site development and use of builder's level. Orientation to and application of building layout, materials used in construction, estimation of materials, concrete form work, placing of concrete under floor framing, girder and floor joist layout. Trade technical calculations. Introduction of local and Uniform Building Codes, standards and Title 24.

Required instructional trips. **No credit** if taken after BLDG 210A-B. Total of 90 hours lecture and 270 hours laboratory.

Grade Mode: L, A

BLDG 230B BUILDING CONSTRUCTION 10 units

Prerequisite: *BLDG 230A.*

Introduction of residential blueprint reading; construction site work; builder's level and transit application. Construction of foundation and floors. Related safety practices in shop and construction site; material take-off, rough plumbing. Under floor insulation and sub-floor installation. Lay out of exterior and interior walls. Trade techni-

cal calculations. Related local and Uniform Building Codes, standards, and Title 24. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

Grade Mode: L, A

BLDG 230C BUILDING CONSTRUCTION

10 units

Prerequisite: *BLDG 230B.*

Introduction to rough framing, roof framing, and stair building. Related safety practices in shop and on construction site. Importance of the measuring tools and their use. Stud, joist, and rafter layout. Roof rafters of equal, unequal or odd sloped roofs; roof sheathing and coverings. Framing to allow for plumbing, electrical, heating, ventilation, and air conditioning (HVAC). Drywall construction. Interior and exterior stair building. Trade technical calculations. Related local and Uniform Building codes, standards and Title 24. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

Grade Mode: L, A

BLDG 230D BUILDING CONSTRUCTION

10 units

Prerequisite: *BLDG 230C.*

Application of interior and exterior finish. Related safety in shop and construction site. Taping and finishing dry wall application. Completion of exterior finish, plumbing fixtures, painting, and ceramic tile. Application of floor covering, cabinet and mill work. Form and place concrete drive. Completion of heating, ventilation, and air conditioning (HVAC). Trade technical calculations. Related local and Uniform Building Codes, standards, and Title 24. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

Grade Mode: L, A

BLDG 232A-D ADDITIONS AND REMODELING

40 units

Prerequisite: *BLDG 232B-D each requires the satisfactory completion of preceding course in this sequence.*

Remodeling carpentry and related mechanical and electrical work. Blueprint reading, permits and codes, materials take-off, carpentry mathematics, foundation work, rough framing, heavy timber, exterior and interior finish, hardware, hand and power tools, safety and security. **Each course** 10 units, 20 hours. Total of 90 hours lecture and 270 hours laboratory.

Grade Mode: L, A

BUSINESS (GENERAL)

(Business and Engineering Technology Division)

BUS 002 PERSONAL FINANCE

3 units

Consumer financial management of: financial records and budgets, savings plans, taxes, automobile purchasing, housing, managing credit, risk management, and investment fundamentals. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

BUS 009 INTRODUCTION TO BUSINESS

3 units

Principles, concepts and functions of modern business. Examination of how business functions such as management, finance, accounting, marketing, international business, entrepreneurship, and other areas impact the growth and sustainability of an organization. Designed to introduce the student to the various career fields in business. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: BUS 110

Grade Mode: L

BUS 010 INTRODUCTION TO MANAGEMENT

3 units

Exploration of management concepts, theories, and principles, with a focus on manager job responsibilities and the role managers play in planning, organizing, leading and motivating teams, and controlling organizations. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

BUS 011A BUSINESS COMMUNICATIONS

3 units

Prerequisite: *ENGL 001A or 001AH, or 001AS.*

Principles of effective business writing and oral communication skills. Develop writing skills for goodwill, negative news, persuasive, and employment messages, report writing and creating documents using Web sources. Prepare business presentations and practice professionalism at work. Total of 54 hours lecture.

Transfer Credit: CSU. *C-ID: BUS 115

Grade Mode: L

BUS 012A BUSINESS LAW

3 units

Development and functions of common law. Definitions and classification of law, court systems and procedures. Law of torts: intentional torts, negligence, defenses, strict liability. Law of intellectual property and cyberlaw. Criminal law and procedures. Law of Contracts: requirement for enforceable agreements, defenses, third parties,

*Course Identification Numbering System (C-ID)

performance and remedies. Law of sales and lease contracts: formation, title, risk, insurable interest, performance, remedies and warranties. Constitutional Law and Business. Business ethics. Business entities and agency. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: BUS 125*

Grade Mode: L, A, P

BUS 012B BUSINESS LAW TRANSACTIONS & ORGANIZATIONS

3 units

Prerequisite: BUS 012A.

Review of ethics, principles, and application of rules of law relating to business organizations. Topics include negotiable instruments, creditors' rights and bankruptcy, agency and employment, business entities, government regulations, personal property, bailments, real property, and landlord-tenant law. Intended for Business and Paralegal students. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

BUS 014A MATHEMATICAL ANALYSIS FOR BUSINESS — FINITE

4 units

Prerequisites: MATH 131 or 133B or 134B or 150, or placement based on the Business Mathematics assessment process.

Algebraic and geometric concepts applied to finding solutions of problems in business, economics, and social sciences. Special emphasis on mathematics of finance, linear and quadratic functions, break-even analysis, supply/demand curves, systems of linear equations and inequalities, matrices, linear programming, sets and Venn diagrams, combinatorial techniques, and probability. Total of 72 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: MATH 130*

Grade Mode: L

BUS 014B MATHEMATICAL ANALYSIS FOR BUSINESS — CALCULUS

4 units

Prerequisite: BUS 014A.

Techniques of calculus with emphasis placed on the application of these concepts to business and management related problems. Applications of derivatives and integrals of functions including polynomials, rational, exponential and logarithmic functions are studied with special emphasis on system optimization, cost and revenue analysis, marginal analysis, elasticity, consumer and producers' surplus, and continuous flow of money problems. Total of 72 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: MATH 140*

Grade Mode: L, A

BUS 016 BUSINESS COMPUTATIONS USING TECHNOLOGY

3 units

Comprehensive study of business computations using current technology. Topics include banking services, payroll, markup and markdown, interest and loans, taxes, cash and trade discounts, and depreciation. **For** students interested in business careers. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

BUS 020 INDEPENDENT STUDY

1 unit

Prerequisite: Completion of two courses in the Business Education Division.

Individual business-related projects; research techniques; written reports. **Pass/no pass** grading. Total of 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: A, P

BUS 070A WORK EXPERIENCE/INTERNSHIP (PAID)

½-6 units

Prerequisite: Completion of one semester at Pasadena City College and completion of one course in major.

Enrollment Limitation: Instructor approval.

Provides students on-the-job learning in a paid position. Development of effective work habits, attitudes, and career awareness so as to enable students to become productive employees. Credit may be accrued at the rate of 0.5 to 6 units per semester. One unit of credit for each 75 hours of paid work experience.

Transfer Credit: CSU; UC credit under review.

Grade Mode:

BUS 070B WORK EXPERIENCE/INTERNSHIP (UNPAID)

½-6 units

Prerequisite: Completion of one semester at Pasadena City College and completion of one course in major.

Enrollment Limitation: Instructor approval.

Provides students on-the-job learning in an unpaid position. Development of effective work habits, attitudes, and career awareness so as to enable students to become productive employees. Credit may be accrued at the rate of 0.5 to 6 units per semester. One unit of credit for each 60 hours of unpaid work experience.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L

**Course Identification Numbering System (C-ID)*

BUS 112 BUSINESS ENGLISH**3 units**

Recommended preparation: ENGL 400 or ESL 033B.

Review of grammar mechanics; writing effective business communications through study of word usage, punctuation, sentence pattern and structure, and paragraphing. Total of 54 hours lecture.

Grade Mode: L, A

BUS 114 BUSINESS MATHEMATICS**3 units**

Mathematical processes and techniques currently used in the fields of business and finance. Emphasis on solving business problems related to financial decision-making and the management of cash flow. Calculate percentages, trade and cash discounts, markups and markdowns, simple and compound interest, bank discounts, present and future value of annuities and sinking funds. Total of 54 hours of lecture.

Grade Mode: L, A

BUS 116 ENTREPRENEURSHIP**3 units**

Fundamental aspects of an entrepreneurial mindset as an essential life skill. Application of proven principles of successful entrepreneurship and the steps necessary to identify and create opportunities. Development of the process of identifying problems, finding solutions, and making business connections beyond the classroom. Total of 54 hours lecture.

Grade Mode: L, A, P

BUS 117 HUMAN RELATIONS/ORGANIZATIONAL BEHAVIOR**3 units**

Study of the interpersonal skills needed to succeed in the business environment. How people work and relate at the individual, group and organizational level. Special attention is given to appropriate communication skills in the workplace, team work, motivation, leadership skill and how to handle organizational change. Total of 54 hours lecture.

Grade Mode: L

BUS 118 INVESTMENTS**3 units**

Principles of investments; types of investment programs and securities. Analysis of financial statements. Total of 54 hours lecture.

Grade Mode: L, A, P

BUS 128 HUMAN RESOURCES MANAGEMENT**3 units**

Human resource administration of public and private organizations including personnel administration, supervision and training. Emphasis on actual personnel problems;

principles and methods involved in recruitment, selection and placement of employees with regard to affirmative action programs, training, experience and aptitudes. Total of 54 hours lecture.

Grade Mode: L, A, P

BUS 150 INTRODUCTION TO INTERNATIONAL BUSINESS**3 units**

General business problems, theories, techniques, and strategies necessary for the development of business activities in the global marketplace. Topics include the impact of culture, political and economic environments on international business operations of countries worldwide. Global perspective of business fundamentals as they relate to international management, communication, marketing, finance, and ethics. Total of 54 hours lecture.

Grade Mode: L, A

BUS 151 INTERNATIONAL MARKETING**3 units**

Marketing techniques and strategies necessary to incorporate international marketing concepts into the global marketplace. Promotes an understanding of the impact that a country's culture and environment have on the marketing mix as well as the challenges of competing in global markets. Total 54 hours lecture.

Grade Mode: L, A

BUS 152 PRINCIPLES OF IMPORTING AND EXPORTING**3 units**

Overview of importing and exporting as drivers of globalization. Explores the benefits, costs, and risks of importing and exporting, as well as trade regulations involved. Covers cross-culture comparisons of foreign business, legal and political practices, trade patterns, and markets as a means of implementing successful import/export plans. Total 54 hours lecture.

Grade Mode: L, A

BUS 160 SALES AND CUSTOMER SERVICE**3 units**

Analysis of the steps involved in the selling process and the delivery of effective customer service in order to enhance goodwill and improve company performance. Theory and skills include building customer rapport, handling problems and complaints, communicating, dealing with difficult customers and projecting a professional image. Development of the relationship between the company and the competition. Total of 54 hours lecture.

Grade Mode: L

**BUS 161 APPLIED BUSINESS PRINCIPLES
AND PRACTICES**

2 units

A study of appropriate business policies, practices and procedures; business etiquette/protocol; cultural diversity in the global workplace; and conflict resolution. Total of 36 hours lecture.

Grade Mode: L, A

BUS 170 WORK EXPERIENCE INTERNSHIP

1-3 units

Supervised work experience in a professional organization to assist in employment transition. Analysis of professional activities, behavior style and collaborative team dynamics. **Requires** 60 hours of non-paid work or 75 hours of paid work for one semester unit. Total of 60 to 225 hours of work experience.

Grade Mode: L, A, P

BUS 180 SUPPLY CHAIN MANAGEMENT

3 credits

Examination of the process of planning, organizing, and controlling the flow of materials and services from supplier to end users/customers. Focus on coordinating supply management, operations and integrated logistics into a seamless pipeline to maintain a continual flow of products and services. Total of 54 hours lecture.

Grade Mode: L

BUSINESS INFORMATION TECHNOLOGY

(Business and Engineering Technology Division)

BIT 010 BASIC COMPUTER KEYBOARDING

1 unit

Touch control of the microcomputer keyboard, basic keyboarding skills and numeric keypad operations. Total of 9 hours lecture and 27 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

BIT 011 BUSINESS DOCUMENT PROCESSING

2 units

Production of business documents using word processing software including proofreading and proper grammar and punctuation. Development of computer keyboarding technique, speed, and accuracy. **No credit** if taken after BIT 011B. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L

**BIT 025 SURVEY OF COMPUTER TECHNOLOGY IN
BUSINESS**

3 units

Survey of Business information systems and technology, networking, e-commerce, ethics and security, systems hardware and software components, and commonly used business software applications, including word processing, spreadsheets, graphics, and database management. Applications of these concepts and methods through hands-on projects developing computer-based solutions to business problems. Total of 54 hours lecture.

Transfer Credit: CSU. *C-ID; BUS 140

Grade Mode: L

BIT 100 WORD PROCESSING BASICS

1 unit

Recommended preparation: Enrollment in or completion of BIT 107.

Introduction to basic concepts and software to create, edit, store, retrieve and print letters, reports and simple tables.

Recommended BIT 010, 011A, or keyboarding/typing speed of 20 wpm. **No credit** if taken after or concurrently with BIT 128A, 128B, 012A, 012B, 012C, or 012D. Total of 18 hours lecture and 18 hours laboratory.

Grade Mode: L, A

BIT 102 SPREADSHEET BASICS

1 unit

Recommended preparation: Enrollment in or completion of BIT 107.

Introduction to basic concepts and use of spreadsheet software to create, edit, store, retrieve and print simple spreadsheets and charts. **No credit** if taken after or concurrently with BIT 103A or BIT 103B, BIT 133A, or BIT 133B. Total of 18 hours lecture and 18 hours laboratory.

Grade Mode: L, A

BIT 105 BUSINESS SOFTWARE-MICROSOFT ACCESS

2 units

Prerequisite: Enrollment in or completion of BIT 106.

Intermediate to advanced relational database concepts to create database tables, forms, business reports, macros, and queries. **No credit** if taken after BIT 105B. Total of 36 hours lecture.

Grade Mode: L, A

**BIT 106 BUSINESS SOFTWARE — INTRODUCTION
TO MICROSOFT OFFICE SYSTEM**

3 units

Comprehensive overview of the Microsoft Office System applications including Word, Excel, PowerPoint, and Access; integration of applications to create reports and presentations. Total of 54 hours lecture.

Grade Mode: L, A

*Course Identification Numbering System (C-ID)

BIT 107 BUSINESS SOFTWARE — WINDOWS**1 unit**

Use and management of the environment and file system within the Windows operating system on both local and cloud systems. Concepts and terminology; end-user techniques for searching and for basic diagnostic and trouble-shooting procedures. Total of 18 hours lecture.

Grade Mode: L, A

BIT 108 MICROSOFT OUTLOOK AND PRODUCTIVITY TOOLS**1 unit**

Use and features of business communication software, email software, and emerging business technologies including Microsoft Outlook and Google Drive. Electronic document routing, organizers, calendars, meeting and facility schedulers, and collaborative techniques. Total of 18 hours lecture.

Grade Mode: L, A

BIT 109 BUSINESS SOFTWARE — MICROSOFT POWERPOINT**2 units**

Prerequisite: BIT 106.

Concepts and use of presentation graphics software to plan and develop effective business presentations. Total of 36 hours lecture.

Grade Mode: L, A

BIT 115 BUSINESS RECORDS SKILLS**1 unit**

Introduction to records management concepts and database software using Microsoft Access. Records management systems for organizing business information, materials, and records by applying standard indexing rules and using manual and electronic filing systems (alphabetic, numeric, geographic, chronologic, and subject). Total of 18 hours lecture.

Grade Mode: L, A

BIT 117 COLLABORATIVE WEB-BASED WORKSPACES**1 unit**

Prerequisite: Enrollment in or completion of BIT 107.

Introduction to web-based collaborative workspace software to enhance work, data, and content collaboration in an organizational environment. Emphasis on working as a team, and on workspace sites, workflows, content publication, discussion boards, document libraries, tracking tasks, blogs, wikis, and managing users and permissions. Projects include the design and creation of customized workspaces to solve specific business needs. Total of 18 hours lecture.

Grade Mode: L, A

BIT 121 LIFE DESIGN FOR THE 21ST CENTURY**3 units**

Life and occupational preparation; establish a dynamic 10-year plan which integrates goal setting, identity formation, decision making, budget projection, online career research, skills identification, and life-long learning. Total of 54 hours lecture.

Grade Mode: L, A, P

BIT 122 INTERNET RESEARCH FOR BUSINESS**1 unit**

Conducting Internet research, and evaluating, managing, and organizing Internet research findings to effectively communicate information in business. Total of 18 hours lecture.

Grade Mode: L, A

BIT 124 ADMINISTRATIVE BUSINESS PROCEDURES**3 units**

Administrative support procedures, task organization, time management, team concepts and customer service skills, business travel and meeting arrangements, effective personal interactions to facilitate office work flow, and making ethical choices in the office. Simulated on-the-job training. Total of 54 lecture hours.

Grade Mode: L, A

BIT 128 BUSINESS SOFTWARE-MICROSOFT WORD**2 units**

Prerequisites: Enrollment in or completion of BIT 106 and BIT 011.

Application of intermediate to advanced word processing concepts to create, edit, and format business documents such as memos, forms, newsletters, reports, tables, and templates. Topics include mail merge, images, complex tables, macros, collaboration tools, and master documents.

No credit if taken after BIT 128B. Total of 36 hours lecture.

Grade Mode: L, A

BIT 131 PROFESSIONAL SKILLS FOR CAREER SUCCESS**3 units**

Navigating technology at work; creativity and innovation; interpersonal communications; time management; organization skills; effective listening; valuing diversity; and value-added service. Includes role playing and critical thinking activities to teach these valuable skills in an integrated manner. Total of 54 hours lecture.

Grade Mode: L, A, P

BIT 133 BUSINESS SOFTWARE-MICROSOFT EXCEL**2 units**

Prerequisite: Enrollment in or completion of BIT 106.

Application of intermediate to advanced spreadsheet software to prepare budgets, record accounting information, and conduct financial analysis. Topics include formula and

function creation, PivotTables and PivotCharts, macros, data analysis, what-if analysis, and charts. **No credit** if taken after BIT 133B. Total of 36 hours lecture.

Grade Mode: L, A

**BIT 135 BUSINESS SOFTWARE – CUSTOMER
RELATIONSHIP MANAGEMENT**

2 units

Prerequisite: Enrollment in or completion of MRKT 020.

Introduction to Customer Relationship Management software to compile, format, and report sales, marketing, and customer service information. Emphasis will be on CRM software to track sales leads, organize marketing campaigns, and track customer interactions. Total of 36 hours lecture.

Grade Mode: L

CHEMISTRY

(Natural Sciences Division)

**CHEM 001A GENERAL CHEMISTRY AND
CHEMICAL ANALYSIS**

5 units

Prerequisites: (1)MATH 131 or its equivalent, and (2) CHEM 022 or equivalent skills as demonstrated through placement based on the chemistry assessment process.

Standard general chemistry for science and engineering majors, with emphasis on quantitative methods and calculations. Atomic structure and chemical bonding, stoichiometry, gases, liquids, solids and solution chemistry. Introductions to equilibrium and organic chemistry. Quantitative analysis using analytical balances, gravimetric and volumetric procedures, spectrophotometry and calorimetry. Total of 54 hours lecture and 108 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

*C-ID: CHEM 110; CHEM SEQ 120S (with CHEM 001B)

Grade Mode: L, P

**CHEM 001B GENERAL CHEMISTRY AND
CHEMICAL ANALYSIS**

5 units

Prerequisite: CHEM 001A.

Standard general chemistry for science and engineering majors, with emphasis on quantitative methods and calculations. Kinetics, equilibrium, thermodynamics, introduction to electrochemistry, coordination compounds, nuclear chemistry, and the chemistry of selected metals and nonmetals, potentiometric titrations and electrochemical cells. Total of 54 hours lecture and 108 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

*C-ID: CHEM SEQ 120S (with CHEM 001A)

Grade Mode: L, P

**CHEM 002A CHEMISTRY — GENERAL, ORGANIC
AND BIOCHEMISTRY**

4 units

Prerequisite: MATH 125 or MATH 127B or MATH 128B or MATH 150.

Principles of chemistry for health science majors. Atomic and molecular structure, chemical bonding, nomenclature, chemical reactions and stoichiometry, gases, solutions, acids and bases, pH, buffers, nuclear and organic chemistry. **No credit** if taken after CHEM 001A. Total of 54 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

*C-ID: CHEM 101

Grade Mode: L, A, P

**CHEM 002B CHEMISTRY — GENERAL, ORGANIC
AND BIOCHEMISTRY**

4 units

Prerequisite: CHEM 002A.

Principles of chemistry for health science majors. Organic and biochemistry: reaction mechanisms, kinetics, enzymes, protein synthesis and metabolism. Total of 54 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

*C-ID: CHEM 102

Grade Mode: L, A, P

CHEM 008A ORGANIC CHEMISTRY

5 units

Prerequisite: CHEM 001B.

Standard organic chemistry for science majors. Structure, bonding, nomenclature, isomerism, stereochemistry and physical properties of organic compounds. A mechanistic approach to the reactions of hydrocarbons, alkyl halides, alcohols, dienes, aromatic compounds, organometallics, IR and NMR spectroscopy and mass spectrometry. Introduction to organic laboratory techniques; preparation, isolation and identification of organic compounds. **No credit** if taken after CHEM 014A and 016A. Total of 54 hours lecture and 108 hours laboratory.

Transfer Credit: CSU; UC. *C-ID: CHEM 150; CHEM SEQ 160 (with CHEM 008B)

Grade Mode: L, A, P

CHEM 008B ORGANIC CHEMISTRY

5 units

Prerequisite: CHEM 008A.

Standard organic chemistry for science majors. A mechanistic approach to the reactions of alcohols, phenols, ethers and epoxides, aldehydes, ketones, carboxylic acids and their derivatives and amines. Photochemistry, organic redox, polymerization, rearrangements, synthesis and an introduction to biochemical molecules. Qualitative analysis, natural products, multistep synthesis and kinetics.

*Course Identification Numbering System (C-ID)

No credit if taken after CHEM 014B and 016B. Total of 54 hours lecture and 108 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: CHEM SEQ 160S (with CHEM 008A)*

Grade Mode: L, A, P

CHEM 020 INDEPENDENT STUDY

1 unit

Recommended Preparation: Enrollment in or completion of any college-level (1-99) course in the Natural Sciences.

Enrollment Limitation: Permission of the Dean.

Independent, faculty-guided student inquiry, project, research, laboratory experiment and/or field investigation. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, P

CHEM 022 INTRODUCTORY CHEMISTRY

4 units

Prerequisite: Enrollment in or completion of MATH 131 or equivalent.

Introduction to principles of chemistry with emphasis on quantitative methods and calculations. **For** science and engineering majors needing preparation for CHEM 001A, but open to all qualified students. Total of 54 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

CHEM 108 PROBLEM SOLVING SKILLS FOR SUCCESS IN ORGANIC CHEMISTRY

1 unit

Corequisite: CHEM 008B.

Development and rigorous practice of essential study techniques and course material for success in CHEM 008B. Integration of supplemental instruction, problem solving strategies and critical thinking skills. **Pass/no pass** grading. Total of 18 hours lecture.

Grade Mode: A, P

CHILD DEVELOPMENT

(Social Sciences Division)

CHDV 010 PRINCIPLES AND PRACTICES OF TEACHING YOUNG CHILDREN

3 units

Examination of the underlying theoretical principles of developmentally appropriate practices applied to programs, environments, emphasizing the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative and intellectu-

al development for all young children. Includes a review of the historical roots of early childhood education programs and the evolution of the professional practices promoting advocacy, ethics, and professional identity. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: ECE 120*

Grade Mode: L, P

CHDV 011 INFANT AND TODDLER DEVELOPMENT

3 units

Prerequisites: CHDV 010 and PSYC 021 or 121.

A study of infants and toddlers from pre-conception to age three including physical, cognitive, language, social, and emotional growth and development. Applies theoretical frameworks to interpret behavior and interactions between heredity and environment. Emphasizes the role of family and relationships in development. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

CHDV 012A ADMINISTRATION I: PROGRAMS IN EARLY CHILDHOOD

3 units

Prerequisites: CHDV 010 and either PSYC 021 or 121.

Introduction to the administration of early childhood programs. Includes program types, program operations and fiscal management, regulatory systems, development and implementation of policies and procedures, community and family resources and relationships. **No credit** if taken after CHDV 112A. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, P

CHDV 012B ADMINISTRATION II: PERSONNEL AND LEADERSHIP IN EARLY CHILDHOOD EDUCATION

3 units

Prerequisite: CHDV 012A.

Current issues in administration of early care programs. Effective personnel management strategies including employee advancement through professional growth and development. Understanding applicability of legal and ethical responsibilities. **No credit** if taken after CHDV 112B. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L

CHDV 013A PRACTICUM IN CHILD DEVELOPMENT - A

2 units

Prerequisites: CHDV 010 and PSYC 021 or 121.

Corequisites: CHDV 013AF.

Student teachers design experiences that promote positive development and learning for young children. Students demonstrate developmentally appropriate early childhood activities and lesson plans. Emphasis on child-centered,

*Course Identification Numbering System (C-ID)

play-initiated approaches to teaching, learning and assessment. Knowledge of curriculum content areas. Total of 36 hours lecture.

*Transfer Credit: CSU. *C-ID: ECE 210*

Grade Mode: L, A

CHDV 013AF FIELD PRACTICE IN CHILD DEVELOPMENT - A

2 units

Prerequisite: CHDV 010 and PSYC 021 or 121 and maintain enrollment in 7 or more units, including CHDV 013A.

Corequisite: CHDV 013A.

Practical classroom experiences to connect theory and practice in Child Development; develop professional behaviors in student teachers while working with young children; and build a comprehensive understanding of children and families in a classroom setting, including understanding of early intervention needs and practices. Demonstration of developmentally appropriate early childhood teaching competencies under the supervision of CHDV faculty and other qualified early education professionals. Emphasis on child centered, play-initiated approaches to teaching, learning and assessment; and knowledge of curriculum content areas as student teachers implement and evaluate experiences that promote positive development and learning for young children. Total of 120 hours field practice.

*Transfer Credit: CSU. *C-ID: ECE 210*

Grade Mode: L, A

CHDV 013B PRACTICUM IN CHILD DEVELOPMENT - B

2 units

Prerequisites: CHDV 013A and CHDV 013AF and maintain enrollment of 7 units or more including field practice.

Corequisite: CHDV 013BF.

Opportunity to learn developmentally-appropriate early childhood teaching strategies. Participation in advocacy project and development of Professional Portfolio. Meets partial fulfillment of the state requirement for the California Child Development Permit. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

CHDV 013BF FIELD PRACTICE IN CHILD DEVELOPMENT B

2 units

Prerequisite: CHDV 013A and CHDV 013AF.

Corequisite: CHDV 013B.

Opportunity to demonstrate developmentally-appropriate early childhood teaching competencies under guided supervision. Students will utilize practical classroom experiences to connect theory and practice, develop professional

behaviors, and build a comprehensive understanding of children and families, including gaining experience with Parent Conferencing. Child centered, play-oriented approaches to teaching, learning, and assessment will be utilized. Meets partial fulfillment of the state requirement for the California Child Development Permit. Total of 120 hours field practice.

Transfer Credit: CSU

Grade Mode: L, A

CHDV 014 OBSERVATION AND ASSESSMENT OF YOUNG CHILDREN

3 units

Prerequisite: CHDV 010 and either PSYC 021 or PSYC 021H.

Recommended Preparation: CHDV 013A, CHDV 013AF, and CHDV 020.

Focus on the appropriate use of assessment and observation strategies to document development, behavior, growth, play and learning in order to join with families and professionals in promoting children's success and maintaining quality programs. Recording strategies, rating systems, portfolios, and multiple assessment methods are explored. Child/student observations will be conducted and analyzed. Total of 54 lecture hours.

*Transfer Credit: CSU. *C-ID: ECE 200*

Grade Mode: L, A

CHDV 015 CHILD, FAMILY AND COMMUNITY

3 units

Recommended preparation: CHDV 010 and either PSYC 021 or 121.

An examination of the developing child in a societal context which focuses on the interrelationships of family, school, and community and emphasizes historical and socio-cultural factors. The processes of socialization and identity development will be highlighted, showing the importance of respectful, reciprocal relationships that support and empower families. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: CDEV 110*

Grade Mode: L, P

CHDV 016 HEALTH, SAFETY AND NUTRITION

3 units

Prerequisites: CHDV 010 and either PSYC 021 or 121H.

Introduction to the laws, regulations, standards, policies and procedures and early childhood curriculum related to child health safety and nutrition. The key components that ensure physical health, mental health and safety for both children and staff will be identified along with the importance of collaboration with families and health professionals. Focus on integrating the concepts into everyday planning and program development. CPR techniques, pediatric first aid; prevention and detection of child abuse. **No**

**Course Identification Numbering System (C-ID)*

credit if taken after CHDV 116. Total of 54 hours lecture.
*Transfer Credit: CSU. *C-ID: ECE 220*
Grade Mode: L, A

CHDV 017 TEACHING CHILDREN IN A DIVERSE SOCIETY

3 units

Development of social identities in diverse societies including theoretical and practical implications of oppression and privilege affecting young children, families, programs, classrooms, teaching, education and schooling. Exploration of various classroom strategies emphasizing culturally and linguistically appropriate anti-bias approaches supporting children in becoming competent members of a diverse society. Self-examination and reflection of one's own issues and understanding of educational principles in integrating social identity, stereotypes and bias, social and educational access, media, schooling, better informed teaching practices and/or program development. **No credit** if taken after CHDV 117. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: ECE 230*

Grade Mode: L

CHDV 020 INTRODUCTION TO CURRICULUM PLANNING

3 units

Prerequisites: CHDV 010 *and* either PSYC 021 or 121.

Recommended Preparation: CHDV 013A.

Overview of knowledge and skills providing appropriate curriculum and environments for children from birth to age 6. A teacher's role in supporting development and engagement for young children. Strategies for developmentally-appropriate practice based on observation and assessments across the curriculum, including 1) academic content areas, 2) play, art, and creativity, 3) development of social-emotional, communication, and cognitive skills, and 4) emphasizing the essential role of play. Includes language and literacy, social and emotional learning, sensory learning, art and creativity, math and science. **No credit** if taken after CHDV 120. Total of 54 lecture hours.

*Transfer Credit: CSU. *C-ID: ECE 130*

Grade Mode: L

CHDV 022 INFANT TODDLER CARE AND EDUCATION

3 units

Prerequisite: CHDV 011.

Application of current theory and research to the care and education of infants and toddlers in group settings. Examines essential policies, principles and practices that lead to quality care and developmentally appropriate curriculum for children birth to 36 months. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

CHDV 024A SPECIAL TOPICS IN CHILD DEVELOPMENT – HEALTH AND SAFETY

2 units

Explores theory and current health and safety practices in care and educational settings of children from birth to 12 years of age. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

CHDV 024B SPECIAL TOPICS IN CHILD DEVELOPMENT – CURRICULUM

2 units

Study of curriculum theory, regulations, and practice in care and educational settings for children from birth to 12 years of age. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

CHDV 024C SPECIAL TOPICS IN CHILD DEVELOPMENT – THE YOUNG CHILD

2 units

Examines intrinsic and extrinsic factors which impact learning of the young child in care and educational settings from birth to 12 years of age. Total 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

CHDV 024D SPECIAL TOPICS IN CHILD DEVELOPMENT – WORKING WITH PARENTS

2 units

Examines theory and practices of parental education and the impact on childhood learning in care and educational settings from birth to 12 years of age. Total of 36 hours lecture

Transfer Credit: CSU

Grade Mode: L, A

CHDV 024E SPECIAL TOPICS IN CHILD DEVELOPMENT – MULTICULTURAL ISSUES

2 units

Topics of current and general interest in diversity, anti-bias and multicultural issues in care and educational settings for children from birth to 12 years of age. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

*Course Identification Numbering System (C-ID)

**CHDV 024F SPECIAL TOPICS IN CHILD
DEVELOPMENT – DISCIPLINE**

2 units

Examination of discipline theories and practices in care and educational settings for children from birth through 8 years of age. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

**CHDV 024G SPECIAL TOPICS IN CHILD
DEVELOPMENT – ENVIRONMENT**

2 units

Topics of current and general interest in the practical applications of creating learning environments in care and educational settings for children from birth to 12 years of age. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

**CHDV 024I SPECIAL TOPICS IN CHILD DEVELOPMENT
– ADMINISTRATION**

2 units

Overview of early childhood education program administration. Topics include theoretical perspectives, licensing regulations, and budgetary considerations. **No credit** if taken after CHDV 024H. Total of 36 hours lecture. **Formerly** CHDV 024H.

Transfer Credit: CSU

Grade Mode: L, A

**CHDV 025A EARLY CHILDHOOD EDUCATION
STEM A – MATHEMATICS**

3 units

Prerequisites: CHDV 010 and PSYC 021.

Focus on the principles and methods of planning, presenting and evaluating STEM experiences for young children ages two to five. Students will develop activities that foster children's natural curiosity about mathematical and engineering concepts. These activities will be designed to encourage exploration, experimentation, problem solving and discovery. Methods for adapting math and engineering experiences for young children with special needs will also be discussed. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

CHDV 025B EARLY CHILDHOOD STEM - SCIENCE

3 units

Prerequisite: CHDV 025A.

Integration of developmentally appropriate STEM content with a focus on science and technology into the early childhood classroom curriculum. The process of using inquiry tools and problem-solving strategies and focused learning centers with content embedded in all other classroom areas is explored. Examine numerous evidence-

based instructional strategies for teaching young children, including those who are culturally, linguistically and ability diverse. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

**CHDV 030 INTRODUCTION TO CHILDREN WITH
SPECIAL NEEDS**

3 units

Prerequisites: CHDV 010 and enrollment in or completion of PSYC 021 or PSYC 021H or PSYC 024.

Introduces the variations in development of children with special needs ages birth through eight and the resulting impact on families. Includes an overview of historical and societal influences, laws relating to children with special needs, and the identification and referral process. **No credit** if taken after SET 100. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

**CHDV 035 INTRODUCTION TO CURRICULUM AND
STRATEGIES FOR CHILDREN WITH
SPECIAL NEEDS**

3 units

Prerequisite: CHDV 030.

Covers curriculum and intervention strategies for working with children with disabilities and other special needs in partnership with their families. Focus on the use of observation and assessment in meeting the individualized needs of children in inclusive and natural environments. The role of the teacher as a professional working with families, collaboration with interdisciplinary teams, and cultural competence. **No credit** if taken after CHDV 128. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L

**CHDV 105 CHILDREN WITH CHALLENGING
BEHAVIORS**

3 units

Prerequisite: CHDV 010 and enrollment in or completion of PSYC 021 or 021H or PSYC 024.

Overview of the developmental, environmental and cultural factors that impact the behavior of young children, including family stress, child temperament, violence, attachment disorders, and special needs, as well as proactive intervention and prevention techniques. Topics include addressing why children misbehave, how to carefully observe a child, how to create a positive environment to encourage appropriate behavior, and how to effectively address many types of behaviors including those that are aggressive and antisocial, disruptive, destructive, emotional and dependent. **No credit** if taken after SET 105. Total of 54 hours lecture.

Grade Mode: L, A, P

**CHDV 110 SKILLS FOR COLLEGE SUCCESS
IN CHILD DEVELOPMENT**

1 unit

Development of essential study techniques for success in the child development program; orientation to applications of computer-based technology; time management; textbook mastery, lecture outlining, test taking, and critical analysis. Total of 18 hours lecture.

Grade Mode: L, A, P

CHDV 113 EARLY INTERVENTION: HOME VISITING

3 units

Prerequisite: CHDV 010 and CHDV 035.

Overview of the basics required for an early intervention assistant to effectively provide services to a child with a disability and the family in the home environment. Philosophies regarding early intervention services in the home. Topics include the diversity of environments, family systems and interpersonal communication styles. Additional topics provide support relating to personal organization and preparation for the visits, collaboration with other professionals, infant mental health and developing appropriate home-based interventions for the child and family. **No credit** if taken after SET 113. Total of 54 hours lecture.

Grade Mode: L, A

CHDV 114 EARLY INTERVENTION

3 units

Prerequisite: CHDV 010 and CHDV 011.

Study of infants and toddlers with disabilities, atypical development or other special needs, both in the early intervention setting and in the child care setting. Explores strategies and interventions used in the field of early intervention. Current theories in early intervention, early relationships, family systems, grief processing and stressors will be studied. Total of 54 hours lecture.

Grade Mode: L, A

**CHDV 118 LANGUAGE AND LITERACY IN EARLY
CHILDHOOD**

3 units

Introduction and survey of the range and stages of language and literacy development theories, practices and activities that support young children's emerging language and literacy skills, birth through age 8. Total of 54 hours lecture.

Grade Mode: L, A

**CHDV 119 ADULT SUPERVISION AND MENTORING
IN EARLY CARE AND EDUCATION**

3 units

Prerequisites: All the following: CHDV 013A, 013AF, 015 and 020.

Methods and principles of supervising student teachers, volunteers, staff, and other adults in early care and education settings. Emphasis is on the roles and development of early childhood professionals as mentors and leaders. Course is a requirement in order to apply to become a Mentor Teacher with the State of California. Total of 54 hours lecture.

Grade Mode: L,

**CHDV 122 PRACTICUM IN EARLY INTERVENTION/
SPECIAL EDUCATION**

2 units

Prerequisite: CHDV 030.

Corequisite: CHDV 122F.

Preparation for teaching basic academic and life processes skills to students with disabilities. Theory and practice includes the basic principles of educational and developmental psychology; the art of observing, teaching and guiding young children; planning and administration of developmentally appropriate inclusive educational activities; school safety and health issues; and the social and emotional foundations of early care and education.

No credit if taken after SET 122. Total of 36 hours lecture.

Grade Mode: L, A

**CHDV 122F FIELD PRACTICE IN EARLY
INTERVENTION/SPECIAL EDUCATION**

1 unit

Corequisite: CHDV 122.

Practical classroom experiences to make connections between theory and practice with infants and young children with disabilities and other special needs, including understanding of early intervention needs and practices. Demonstration of developmentally appropriate early childhood teaching competencies under the supervision of qualified early education professionals. Emphasis on child-centered, play-oriented approaches to teaching, learning and assessment; and knowledge of curriculum content areas as student teachers implement and evaluate experiences that promote positive development and learning for young children with disabilities or other special needs. Total of 60 hours field practice.

Grade Mode: L, A

CHDV 196 CHILD DEVELOPMENT LABORATORY

1 unit

Opportunity for child development and education students to study in their chosen specialization in child development at the advanced level by performing guided laboratory applications and exercises. Total of 9 hours lecture and 27 hours laboratory.

Grade Mode: L, A, P

CHINESE

(Languages Division)

CHIN 001 ELEMENTARY CHINESE (Mandarin)

5 units

Pronunciation and grammar; reading and writing Chinese characters; vocabulary building. Introduction to geography; customs and culture of China. Corresponds to first year of high school Chinese. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, P

CHIN 002 ELEMENTARY CHINESE (Mandarin)

5 units

Prerequisite: CHIN 001, or the first year of high school Chinese, or placement based on the foreign language assessment process.

Continuation of Chinese 001. Further development of grammar and sentence patterns, oral and written composition, reading of elementary texts; customs and culture of China. **No credit** if taken after CHIN 002A. Total of 90 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, P

CHIN 002A ACCELERATED ELEMENTARY CHINESE (Mandarin)

5 units

Intensive training in oral and written Chinese. Designed for students who already have some degree of fluency in spoken Chinese, but have had little or no formal training in reading and writing of Chinese characters. Improvement of oral expression. Introduction to Chinese grammar essentials, readings of simple contemporary Chinese stories; oral and written composition. **No credit** if taken after CHIN 001 or 002. Total of 90 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

CHIN 003 INTERMEDIATE CHINESE (Mandarin) – LEVEL I

5 units

Prerequisite: CHIN 002 or CHIN 002A, or two years of high school Chinese, or placement based on the foreign language assessment process.

Grammar; oral and written composition; reading of intermediate texts, Chinese customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

CHIN 004 INTERMEDIATE CHINESE (Mandarin)

5 units

Prerequisite: CHIN 003 or, three years of high school Chinese, or placement based on the foreign language assessment process.

Continuation of grammar, oral and written composition; reading of texts of moderate difficulty, including modern Chinese literature. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

CHIN 005 ADVANCED CHINESE READING AND COMPOSITION

3 units

Prerequisite: CHIN 004 or placement based on the foreign language assessment process.

Reading and writing of Chinese texts with advanced written styles and syntax. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

CHIN 008A INTRODUCTION TO CHINESE CONVERSATION (Mandarin)

2 units

Prerequisites: CHIN 002, CHIN 002A, or placement based on the foreign language assessment process.

Practice in oral self-expression and understanding spoken Chinese. **No credit** if taken after CHIN 003 or CHIN 009A-B. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

CHIN 008B INTRODUCTION TO CHINESE CONVERSATION (Mandarin)

2 units

Prerequisites: CHIN 002, CHIN 002A, or placement based on the foreign language assessment process.

Practice in oral self-expression and understanding spoken Chinese. **No credit** if taken after CHIN 003 or CHIN 009A-B. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

CHIN 009A CHINESE CONVERSATION (Mandarin)

2 units

Prerequisite: CHIN 003, CHIN 008A-B, or placement based on the foreign language assessment process.

Intensive practice in oral expression and comprehension of spoken Chinese. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

CHIN 009B CHINESE CONVERSATION (Mandarin)**2 units****Prerequisite:** CHIN 003, CHIN 008A-B, or placement based on the foreign language assessment process.

Intensive practice in oral expression and comprehension of spoken Chinese. Total of 36 hours lecture.

Transfer Credit: CSU**Grade Mode:** L, A, P**CHIN 009C CHINESE CONVERSATION (Mandarin)****2 units****Prerequisite:** CHIN 003, CHIN 008A-B, or placement based on the foreign language assessment process.

Intensive practice in oral expression and comprehension of spoken Chinese. Total of 36 hours lecture.

Transfer Credit: CSU**Grade Mode:** L, A, P**CHIN 010 CHINESE CIVILIZATION****3 units**

The study of Chinese literature, arts, philosophy, geography, religion and the social and political environment; Chinese contributions to civilization from the classical period to modern times. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC**Grade Mode:** L, A, P**CHIN 012 CHINESE LITERATURE IN TRANSLATION****3 units****Prerequisite:** Eligibility for ENGL 001A.

Reading and discussion of major works of Chinese literature in translation from different historical periods. Selected readings will be made from different genres: poetry, drama, essays and the novel. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC**Grade Mode:** L, A, P**CHIN 022 CHINESE CALLIGRAPHY****3 units**

History, development, aesthetics, and appreciation of Chinese calligraphy. An examination of Chinese character formation, evolution and etymology as well as a survey of varieties of Chinese scripts and hands-on practice of Chinese calligraphy. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC**Grade Mode:** L, A, P**CHIN 050 CHINESE CINEMA****3 units****Prerequisite:** Eligibility for ENGL 001A.

Introduction to Chinese cinema. Chinese culture, society,

and historical periods through the viewing and discussion of Chinese films from mainland China, Hong Kong, and Taiwan. (Course conducted in English). Total of 54 hours lecture.

Transfer Credit: CSU; UC**Grade Mode:** L, A, P**CHIN 150A CHINESE FOR BUSINESS AND TRAVEL****2 units**

Practical conversational Chinese for business and travel. Contemporary culture in Chinese-speaking areas. Total of 36 hours lecture.

Grade Mode: L, A, P**CHIN 150B CHINESE FOR BUSINESS AND TRAVEL****2 units****Prerequisite:** CHIN 150A or placement based on the foreign language assessment process.

Further instruction in conversational Chinese for business and travel. Contemporary culture in Chinese-speaking areas. Total of 36 hours lecture.

Grade Mode: L, A, P**CINEMA****(Visual Arts and Media Studies)****CINE 007A EARLY FILM HISTORY****3 units**

Development of motion pictures from their inception to the 1940's. Total of 54 hours lecture.

Transfer Credit: CSU; UC**Grade Mode:** L, A, P**CINE 007B CONTEMPORARY FILM HISTORY****3 units****Recommended preparation:** CINE 007A.

Survey of national and international film movements and developments from the 1950's to the present with special attention given to the influence of Hollywood studios and directors in the world of cinema, art and ideas. Total of 54 hours lecture.

Transfer Credit: CSU; UC**Grade Mode:** L, A, P**CINE 025 FILM ART****3 units**

Aesthetic and technical analysis of camera, lighting, sound, direction and structure in short and feature films with an emphasis on innovation. Total of 54 hours lecture.

Transfer Credit: CSU; UC**Grade Mode:** L

CINE 026A BEGINNING ELECTRONIC FILMMAKING**3 units**

Introduction to the theory, terminology, and process of motion picture production for film. Includes basic cinematography including the operation, function and creative uses of production and post-production equipment, scriptwriting, camera operation, shot composition, lighting, sound recording and mixing, and editing. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

CINE 026B INTERMEDIATE FILMMAKING – ELECTRONIC**3 units**

Prerequisite: CINE 026A.

Intermediate motion picture production. Editing of picture and sound utilizing adjustable iris camcorders. Individual and group projects selected from the following: commercials, experimental, documentary and dramatic film forms. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

CINE 026C ADVANCED FILMMAKING**3 units**

Prerequisite: CINE 026B.

Advanced video or 16mm group motion picture production. Concentration on the roles of director of photography, camera operator, unit production manager, sound crew and editor in the production of short films. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

CINE 027 CINEMATOGRAPHY**3 units**

Introduction to the fundamental technical and aesthetic principles of motion picture photography. Practical training in the use of motion picture cameras. Introduction to image control through exposure, lighting, and selection of film, camera, lens, and filters. Examination of the cinematographer as a visual storyteller to develop a broader understanding of the balance between artist and technician. Examination of the different crew positions and processes of the camera crew. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

CINE 126 DIGITAL FILM NARRATIVE**3 units**

Prerequisites: CINE 026A.

Practical and aesthetic construction of motion pictures using the principles and techniques of computer based non-

linear editing for film, video, and multimedia. **Total** of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

CINE 127 ADVANCED CINEMATOGRAPHY**3 units**

Prerequisites: CINE 026A and CINE 027.

Recommended preparation: CINE 126.

Advanced training and study of techniques and aesthetics in use of motion picture cameras and lighting equipment for those considering a professional career in cinematography. Advanced study of scene creation as well as overall visual design of an entire film. In-depth examination of the different crew positions of the camera crew combined with practical experience. Creation of work for professional portfolio. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

CINE 129 CINEMA PRODUCTION PORTFOLIO**3 units**

Prerequisite: CINE 026C.

Cinema Production/Filmmaking portfolio development, preparation and production for transfer to four-year colleges or professional use. Advanced cinema production/filmmaking, in conception and execution. Development of professional presentation skills. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

COLLEGE**(Counseling)****COLL 001 FIRST YEAR SEMINAR****3 units**

Development of thinking strategies that can be used for lifelong problem solving in academic, social, and personal life. Introduces critical thinking, information literacy, college resources, motivating factors and study skills for student success. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

COMMUNICATION**(Performing and Communication Arts Division)****COMM 001 SURVEY OF MASS COMMUNICATION****3 units**

Mass media as information distributors; print media, radio and television broadcasting, motion pictures, public relations, sales and advertising. Rights and responsibilities

under the First Amendment. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: JOUR 100*

Grade Mode: L, A, P

COMM 020 INDEPENDENT STUDY

1 unit

Prerequisite: *Permission of department chairperson.*

Individual projects in the communication arts and sciences. Total of 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L

COMM 101 COMMUNICATION FIELD PRACTICE

1 unit

Prerequisites: *Maintain enrollment in 7 units or more including field practice; enrollment in or completion of at least one of the following: SPCH 005AB, 018, TVR 002B, 014A-B, 016A, 018, 021, 106A-B, THRT 012A.*

Student projects and supervised on-campus experience in speech pathology, telecommunications, theater arts (including on-campus radio and television production), engineering, newswriting, theater arts technology. **Pass/no pass** grading. Total of 90 hours field practice.

Grade Mode: P

COMM 102 COMMUNICATION FIELD PRACTICE

2 units

Prerequisites: *Maintain enrollment in 7 units or more including field practice; enrollment in or completion of at least one of the following: SPCH 005AB, 018, TVR 002B, 014A-B, 016A, 018, 021, 106A-B, THRT 012A.*

Student projects and supervised on-campus experience in speech pathology, telecommunications, theater arts (including on-campus radio and television production), engineering, newswriting, theater arts technology. **Pass/no pass** grading. Total of 180 hours field practice.

Grade Mode: P

COMPUTER INFORMATION SYSTEMS

(Business and Engineering Technology Division)

CIS 001 INTRODUCTION TO COMPUTERS

3 units

Computer hardware, software, operating systems, file management, local area networks, Internet, digital data representation, and digital media. Computer technology related issues and future trends. Hands-on experience with word processing and presentation software, spreadsheet, and database software. For students with little to no prior computer experience. **No credit** if taken after CIS 010.

Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

CIS 010 INTRODUCTION TO INFORMATION SYSTEMS

3 units

Examination of information systems and their role in business. Focus on information systems, database management systems, system development, networking, Internet and web, e-commerce, security, application development languages and tools, computer systems hardware and software components. Application of these concepts and methods through hands-on projects developing computer-based solutions to business problems. Total of 36 hours lecture and 54 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: ITIS 120*

Grade Mode: L

CIS 011 INFORMATION AND COMMUNICATION TECHNOLOGY ESSENTIALS

4 units

Introduction to the computer hardware and software skills needed to help meet the growing demand for entry-level Information and Communication Technology (ICT) professionals. The fundamentals of computer hardware and software as well as advanced concepts such as security, networking, and the responsibilities of an ICT professional will be introduced. Preparation for the CompTIA A+ certification exams. Total of 54 hours lecture and 54 hours laboratory.

*Transfer Credit: CSU. *C-ID: ITIS 110*

Grade Mode: L

CIS 012 INTRODUCTION TO PROGRAMMING

3 units

Foundation course in programming for students with little or no programming knowledge or experience. An introduction to the fundamental concepts and models of application development including the basic concepts of program design, data structures, programming, problem solving, programming logic, and fundamental design techniques for event-driven programs. Hands-on experience with Python programming language and development platform. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

CIS 014 C++ PROGRAMMING

3 units

Prerequisites: *CIS 012 or equivalent.*

Application development using C++ programming language. Coverage of object-oriented programming principles and techniques. Topics include C++ basics, control structures, functions, arrays, pointers, classes, overloading, data abstraction, encapsulation, inheritance, polymorphism,

**Course Identification Numbering System (C-ID)*

virtual functions, file processing, templates, exceptions, and STL (Standard Template Library). Preparation for the C++Institute's C++ Certified Associate Programmer (CPA) and C++ Certified Professional Programmer (CPP) exams. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

CIS 016 JAVA PROGRAMMING

3 units

Prerequisites: *CIS 012 or equivalent.*

Application development using Java programming language. Coverage of object-oriented programming principles and techniques. Topics include Java basics, control structures, arrays, classes, methods, overloading, encapsulation, inheritance, polymorphism, collections, Lambda expressions, exceptions, Java I/O, Java API, and database applications. Preparation for the Oracle Certified Associate (OCA) –Java SE Programmer and Oracle Certified Professional (OCP) – Java SE Programmer exams. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

CIS 020 INDEPENDENT STUDY

1 unit

Prerequisites: *Minimum grades of C in 12 units of computer information systems courses.*

Individual projects; problem formulation, design, documenting, programming and testing. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

CIS 022 INTRODUCTION TO THE INTERNET

3 units

Prerequisite: *CIS 010.*

General overview of computer systems, networking, and the Internet. World Wide Web, email, telnet, ftp, newsgroups, finding information on the Internet, and basic Web page creation. Legal, ethical, privacy and security issues on the Internet. Total of 90 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

CIS 030 FUNDAMENTALS OF COMPUTER NETWORKS

3 units

Introduction to network applications; fundamental communication concepts; data communication hardware; protocols and software; microcomputers and communications; network configurations, management and security. Total of 54 hours lecture and 18 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, P

CIS 031 INTRODUCTION TO DATABASE MANAGEMENT SYSTEMS

3 units

Prerequisite: *CIS 011 or equivalent.*

Introduction to concepts in data and information management centered around the core skills of identifying organizational information requirements, conceptual data modeling techniques, conversion of conceptual data models into relational data models, verification of structural characteristics with normalization techniques, and implementation of a relational database using an industrial-strength database management system. Overview of data quality and data security tasks, database application development, and data and information management technologies that provide decision support capabilities under the broad business intelligence umbrella. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L

CIS 036 VISUAL BASIC .NET PROGRAMMING

3 units

Prerequisite: *CIS 012 or equivalent.*

Application development using Visual Basic .NET programming language. Coverage of object-oriented programming principles and techniques. Topics include Visual Basic .NET basics, control structures, arrays, classes and objects, methods, overloading, encapsulation, inheritance, polymorphism, interfaces, generics, delegates, exceptions, file processing, Windows Forms, web applications, ADO.NET, and components. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

CIS 038 ADVANCED VISUAL BASIC

3 units

Prerequisite: *CIS 036.*

Advanced techniques in the use of VISUAL BASIC, such as user-friendly menus, internal program documentation and program structure; subroutines, file manipulation, special functions, problem solving and graphics. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

CIS 040 UNIX/LINUX ADMINISTRATION

3 units

Prerequisite: *CIS 011 or valid CompTIA A+ certification or equivalent.*

Installation, configuration, and troubleshooting of Unix/Linux operating systems in a small or enterprise environment: types of installation, device drivers, kernel, process management, scripting, packages, networking services,

system services, storage, cloud computing, remote management, updates, monitoring, system and data recovery, authorization and authentication, and advanced management tools. Preparation for the CompTIA Linux+, LPIC-1: Certified Linux Administrator, and LPIC-2: Certified Linux Engineer certification exams. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L

CIS 041 CCNA R&S: INTRODUCTION TO NETWORKS

3 units

Recommended Preparation: *CIS 011.*

Architecture, structure, functions, components, and models of the Internet and other computer networks. Principles and structure of IP (Internet Protocol) addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for further study of computer networks. Use of the OSI (Open Systems Interconnection) and TCP/IP (Transmission Control Protocol / Internet Protocol) layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. Preparation for the CompTIA Network+, Cisco CCENT and CCNA Routing and Switching certification exams. **No credit** if taken after CIS 161. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L

CIS 042 CCNA R&S: ROUTING AND SWITCHING ESSENTIALS

3 units

Prerequisites: *CIS 041.*

Configuration and troubleshooting of static routing, Routing Information Protocol (RIP), Open Shortest Path First (OSPF), Virtual LANs (VLANs), Inter-VLAN routing, Access Control Lists (ACLs), Dynamic Host Configuration Protocol (DHCP), and Network Address Translation (NAT). Preparation for the Cisco CCENT and CCNA Routing & Switching certification exams. **No credit** if taken after CIS 162. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L

CIS 045 MCSA: MICROSOFT WINDOWS SYSTEM ADMINISTRATION 1

4 units

Prerequisite: *CIS 011 or valid CompTIA A+ certification or equivalent; and CIS 042 or equivalent.*

Deploy, configure, maintain, troubleshoot, and support server hardware and server software technologies in a small to enterprise environment, including a cloud computing environment with an emphasis on the administration of Microsoft Windows Server operating systems infrastructure; storage solutions, server virtualization using Hyper-V, failover clustering, ADDS, DNS, DHCP, MDT, WDS, WSUS,

IPAM, DirectAccess, VPNs, IPv6 transition technologies, system and data recovery. Preparation for the CompTIA Server+ and Microsoft MCSA Windows Server certification exams. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L

CIS 061 INTRODUCTION TO INFORMATION SYSTEMS SECURITY

3 units

Prerequisite: *CIS 011 or valid CompTIA A+ certification or equivalent, and CIS 042 or equivalent.*

Principles of information systems security related to providing, managing, and maintaining secure systems at various organizational levels. Administration of network protocols, analysis of hardware/software processes, communications, applications, policies, and procedures. Principles of cybersecurity, risk management/assessments, reporting, dealing with social challenges and demands, legal and ethical issues, security planning, physical security, and technology. Preparation for the CompTIA Security+ and Cisco CCNA Cyber Ops certification exams. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L

CIS 062 INTRODUCTION TO SYSTEMS ANALYSIS

3 units

Prerequisite: *CIS 010.*

Information systems and the discipline of systems analysis to analyze solutions to a variety of realistic IT problems. Develops skills in applying the tools, techniques, and concepts of systems analysis to information systems development in order to identify and apply constraints to determine feasibility. Apply criteria to select the best information technology solution from alternatives. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, P

CIS 063 INTRODUCTION TO CYBERSECURITY: ETHICAL HACKING

3 units

Prerequisite: *CIS 061 or equivalent, and CIS 012 or equivalent.*

Concepts, principles, and techniques for attacking and disabling a network within the context of properly securing a network. Emphasis on network attack methodologies and appropriate defenses and countermeasures. Preparation for the EC Council's Certified Ethical Hacking certification exam. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L

CIS 065 COMPUTER FORENSICS FUNDAMENTALS

3 units

Prerequisite: *CIS 061 or equivalent.*

Methods used to properly conduct a computer forensics investigation based on objectives of the International Association of Computer Investigative Specialists (IACIS) certification. Topics covered include an overview of computer forensics as a profession, the computer investigation process, ethics, operating systems boot processes and disk structures, data acquisition and analysis; technical writing, and computer forensics tools. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L

CIS 137 MCSA: MICROSOFT WINDOWS CLIENT OPERATING SYSTEMS

3 units

Prerequisite: *CIS 011 or valid CompTIA A+ certification or equivalent.*

Installation, configuration, and troubleshooting of Microsoft Windows client operating systems in a small or enterprise environment: different types of installation, device drivers, networking services, storage, apps, remote management, updates, monitoring, system and data recovery, authorization and authentication, and advanced management tools. Preparation for the Microsoft Certified Solutions Associate (MCSA): Windows client operating systems certification exam. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L

CIS 141 MCSA: MICROSOFT EXCHANGE SERVER ADMINISTRATION

4 units

Prerequisite: *CIS 146.*

Install, configure and manage Microsoft Exchange Server in a Windows Active Directory environment. Configure Microsoft Exchange Server roles. Manage users, mailboxes, security, and database. Configure connectors, antivirus and anti-spam systems, transport rules and message compliance, archiving, policies, client connectivity, public folders, and high availability. Backup and restore Exchange Server. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L

CIS 142A MCSA SQL: MICROSOFT DATABASE DEVELOPMENT

3 units

Recommended Preparation: *CIS 011 and CIS 031.*

Program databases and manage and query data with Microsoft Transact-SQL language. Design, implement, and maintain SQL Databases using Microsoft SQL Server product features and tools. Preparation for the Microsoft Certified Solutions Associate (MCSA) SQL: Database Development

certification. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A

CIS 142B MCSA SQL: MICROSOFT DATABASE ADMINISTRATION

3 units

Prerequisites: *CIS 045 and CIS 142A.*

Install, configure, and maintain Microsoft SQL Server and databases including managing storage, setting up user accounts, authenticating and authorizing users, securing SQL Server, backing up and restoring databases, performing other administrative tasks, transferring data in and out of SQL Server databases, diagnosing system problems, and ensuring high-availability. Preparation for the Microsoft Certified Solutions Associate (MCSA) SQL: Database Administration certification. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, P

CIS 142C MCSA SQL: MICROSOFT BUSINESS INTELLIGENCE DEVELOPMENT

3 units

Prerequisite: *CIS 142A.*

Implementation of a data warehouse platform using Microsoft SQL Server to support Business Intelligence (BI) solutions. Topics include SQL Server Integration Services, SQL Server Data Quality Services and SQL Server Master Data Services. Preparation for the Microsoft Certified Solutions Associate (MCSA) SQL: Business Intelligence certification. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, P

CIS 146 MCSA: MICROSOFT WINDOWS SYSTEM ADMINISTRATION 2

4 units

Prerequisite: *CIS 045.*

Implementation and administration of Active Directory Domain Services (AD DS), distributed AD DS, AD DS sites and replication, users and groups, Group Policy Objects (GPOs), Azure Active Directory, Active Directory Certificate Services (AD CS), Active Directory Rights Management Services (AD RMS), and Active Directory Federation Services (AD FS) and Microsoft Azure services. Preparation for the Microsoft MCSA Windows Server certification exam. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L

CIS 151 VCP-DCV: VMWARE VSPHERE ADMINISTRATION

3 units

Prerequisite: *CIS 011 or valid CompTIA A+ certification or equivalent.*

Installation, configuration and management of VMware vSphere which includes VMware ESXi hosts and VMware vCenter server. Topics include cloud computing architecture,

vSphere virtual infrastructure, vCenter Server architecture, virtual machines, virtual networks, virtual storage, resource management and monitoring, high availability, fault tolerance, distributed resource scheduler, and update manager. Preparation for the VMware Certified Professional – Data Center Virtualization (VCP-DCV) certification exam. Total of 36 hours lecture and 54 hours of laboratory.

Grade Mode: L

CIS 163 CCNA R&S: SCALING NETWORKS

3 units

Prerequisite: CIS 042.

Installation, configuration and management of scaling networks. Topics include: VLAN Trunking Protocol (VTP), Extended VLANs, Dynamic Trunking Protocol (DTP), Spanning Tree Protocols (STP), Link Aggregation, Hot Standby Router Protocol (HSRP), Enhanced Interior Gateway Routing Protocol (EIGRP), and Multi-area Open Shortest Path First (OSPF). Preparation for the CCNA Routing & Switching certification exam. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L

CIS 164 CCNA R&S: CONNECTING NETWORKS

3 units

Prerequisite: CIS 163.

Installation, configuration and management of connecting networks using WAN access and remote access technologies. Topics include: Point-to-Point Protocol (PPP), PPP over Ethernet (PPPoE), Virtual Private Networks (VPNs), Generic Routing Encapsulation (GRE), Internal Border Gateway Protocol (iBGP), Advanced Access Control Lists (ACLs) configurations, network monitoring troubleshooting tools. Preparation for the CCNA Routing & Switching certification exam. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L

CIS 165 CCNP R&S ROUTE: IMPLEMENTING IP ROUTING

4 units

Prerequisite: CIS 164 or valid CCNA R&S certification or equivalent.

Authorized Cisco Networking Academy CCNP R&S ROUTE course with lecture and hands-on lab. Advanced topic in Cisco routing including how to design, configure, maintain and scale routed networks that are growing in size and complexity. Using Cisco routers connected in LANs and WANs typically found at medium to large network sites. Emphasis toward preparing for the Cisco Certified Network Professional (CCNP R&S ROUTE) examination. Total of 54 hours lecture and 72 hours laboratory.

Grade Mode: L

CIS 167 CCNP R&S SWITCH IMPLEMENTING CISCO IP SWITCHED NETWORKS

4 units

Prerequisite: CIS 165.

Build and manage enterprise networks using multilayer switching technologies. Covers enterprise network design, VLANs, Spanning-Tree Protocol (STP), inter-VLAN routing, Multilayer Switching (MLS), Cisco Express Forwarding (CEF), and Hot Standby Router Protocol (HSRP). Securing the switched network model, including setting passwords, local and remote login, modifying default privilege levels, and applying Layer 3 traffic management techniques to the enterprise network. Very detailed information regarding the role of switches in multicasting. Emphasis toward preparing for the Cisco Certified Network Professional (CCNP R&S SWITCH) examination. Total of 54 hours lecture and 72 hours laboratory.

Grade Mode: L

CIS 168 CCNP R&S TSHOOT: TROUBLESHOOTING AND MAINTAINING IP NETWORKS

4 units

Prerequisite: CIS 167.

Diagnose, isolate, and correct network failures and performance problems. Identify troubleshooting targets and use appropriate troubleshooting tools to manage network. Emphasis toward preparing for the Cisco Certified Network Professional, Troubleshooting (CCNP R&S TSHOOT) examination. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L

CIS 169A CCNA SECURITY

4 units

Enrollment Limitation: CIS 164 or valid CCNA R&S Certification or equivalent.

Installation, configuration, troubleshooting and monitoring of Cisco network devices to maintain integrity, confidentiality, and availability of data and devices. Topics include security concepts, secure network infrastructure, managing secure access, AAA, VPN encryption, firewalls, intrusion prevention, web and email content security, and endpoint security. Preparation for the CCNA Security certification exam. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L

CIS 169B CCNP SECURITY: IMPLEMENTING CISCO EDGE NETWORK SECURITY SOLUTIONS

4 units

Prerequisite: CIS 164 or valid CCNA R&S certification or equivalent.

Implement and manage Cisco perimeter edge network security solutions utilizing Cisco Switches, Cisco Routers, and Cisco ASA firewalls. Focus on reducing the risk to IT infrastructures and applications using Cisco network devices.

es. Preparation for the CCNP Security exam (Implementing Cisco Edge Network Security Solutions). Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L

CIS 170 CISCO IP TELEPHONY ADMINISTRATION

4 units

Prerequisite: *CIS 164 or valid CCNA R&S certification or equivalent.*

Install, configure, and troubleshoot Cisco Unified Communications (UC) solutions. Administration of end-user interfaces, telephony and mobility features, dial plan, Cisco IOS gateways, and Cisco UC solutions maintenance. Preparation for the Cisco CCNA Collaboration exam. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L

CIS 190 WEB SERVER DEVELOPMENT

3 units

Prerequisite: *CIS 011 or CIS 136.*

Foundations of the Internet and the World Wide Web: Intranets, technical aspects of the Web, Internet and Web Servers, hypermedia, HTML, scripting languages, Web page development, basic data communication and networking, Web browsers, search engines, file transferring, email, FTP, HTTP, POP, SMTP, TCP/IP, URL's, Web Security, and emphasis on the development of a Web site. Total of 54 hours lecture and 36 hours laboratory.

Grade Mode: L, A

CIS 192 INTRODUCTION TO WEB DEVELOPMENT

3 units

Principles of web page design using HTML, XHTML, CSS, and JavaScript. Practical solutions to building multimedia-based Web Pages using emerging technologies. Total of 36 hours lecture and 54 hours laboratory. **No credit** if taken after GRFX 192.

Grade Mode: L, A, P

CIS 193 WEB DEVELOPMENT USING JAVASCRIPT

3 units

Prerequisite: *CIS 012.*

Web application programming using JavaScript. Course covers adding and manipulating JavaScript code; handling expressions, debugging and error handling; working with browsers, Object-Oriented programming, manipulating strings and arrays; handling security, programming interfaces with today's devices, updating Web pages with Ajax and HTTP, requesting and receiving server data; coding and implementing JQuery. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L

CIS 197 WEB DEVELOPMENT USING PHP & MYSQL

3 units

Prerequisite: *CIS 012.*

Web applications development using PHP and MySQL to build professional, database-driven Web sites that incorporate authentication and security. Includes a comprehensive Web development project that applies core concepts resulting in a PHP code demonstration site. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L

CIS 199 DEVELOPMENT USING RUBY ON RAILS

3 units

Prerequisite: *CIS 012.*

Introduction to Web Applications Development using the Ruby on Rails framework. Topics include Ruby fundamentals, Rails basics, Rails installation, Model-View-Controller (MVC) architecture, ActiveRecord, Controllers, Views, test-driven development, application security, and deployment and scaling. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L

COMPUTER SCIENCE

(Mathematics Division)

CS 001 INTRODUCTION TO COMPUTERS AND PROGRAMMING

5 units

The history of computing, basic computer operation, the notion of an algorithm, variable definitions, expressions, input/output, branches, loops, functions, parameters, selection, iterative techniques, arrays, strings. **For** non-engineering and non-science majors or for students considering taking CS 002 but needing additional preparation. **No credit** if taken after CS 002. Total of 72 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

CS 002 FUNDAMENTALS OF COMPUTER SCIENCE I

4 units

Prerequisite: *Either MATH 007B or MATH 008 or MATH 009.*

Problem solving through structured computer programming of algorithms using the basics of the C++ object-oriented language. Topics include: variables, expressions, input/output (I/O), branches, looping constructs, functions, argument passing, single and double dimensional arrays, strings, file I/O, C++ vectors, software design principles, testing, and debugging techniques. Programming

projects, at least 600 lines of code. **For** STEM Majors, but open to all qualified students. Total of 54 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: COMP 122*

Grade Mode: L, A, P

CS 003A FUNDAMENTALS OF COMPUTER SCIENCE II (C++)

4 units

Prerequisite: CS 002.

Second programming course in the series of Introduction to Computer Science courses. Continuation of the C++ language including: classes, structures and unions, overloaded operators and friend functions, pointers and dynamic arrays, function pointers, functors, abstract data types and container objects polymorphisms, inheritance and multiple inheritance, templates and the Standard Template Library, exception handling, namespaces and separate compilation, recursion, creation of libraries, advanced software design, testing, and debugging techniques. **May be taken concurrently** with CS 003B. **For** STEM Majors: Computer Science, Computer Engineering, Mathematics, and Science majors, but open to all qualified students. Total of 54 hours lecture and 72 hours laboratory.

Transfer credit: CSU; UC

Grade Mode: L, A

CS 003B FUNDAMENTALS OF COMPUTER SCIENCE II (JAVA)

4 units

Prerequisite: CS 002.

Alternate second programming course in the series of Introduction to Computer Science courses. JAVA language including: Data types, variables, control structures, GUI and Object Oriented Design, user-defined methods, method overloading, user-defined classes and abstract data types, accessor and mutator methods, collections, single and multidimensional arrays, polymorphisms, inheritance, exception handling, recursion, searching and sorting algorithms, creation of libraries, advanced software design, testing, and debugging techniques web-based applets. **May be taken concurrently** with CS 003A. **For** STEM Majors: Computer Science, Engineering, Mathematics, and Science majors, but open to all qualified students. Total of 54 hours lecture and 72 hours laboratory.

Transfer credit: CSU; UC

Grade Mode: L, A

CS 003C FUNDAMENTALS OF COMPUTER SCIENCE II (PYTHON)

4 units

Prerequisite: CS 002.

Second programming course in the series of Introduction to Computer Science courses. Topics of the Python language include: data types, variables, control structures, Python Objects and Oriented Design, standard and advanced mathematical libraries, tool-chain use and Python Frameworks, user-defined classes and abstract collections, single and multidimensional arrays, Python lists, tuples, collections, and dictionaries. **May be taken concurrently** with CS 003A or CS 003B. **Recommended** for STEM Majors: Computer Science, Engineering, Mathematics, and Science majors, but open to all qualified students. Total of 54 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

CS 006 INTRODUCTION TO APPLIED LOGIC DESIGN 4 units

Prerequisite: CS 002.

Characteristics of digital systems, truth functions, Boolean algebra, switching devices, minimization of Boolean functions, single and multiple output circuits, Mealy and Moore networks. Karnaugh maps, state tables. Design and optimization of combinational circuits and sequential circuits. **Recommended** completion of or concurrent enrollment in Math 022. **For** Computer Science, Computer Engineering, Mathematics, and Science majors, but open to all qualified students. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

CS 008 FUNDAMENTALS OF COMPUTER SCIENCE III – DATA STRUCTURES

4 units

Prerequisite: CS 003A.

Recommended Preparation: *Proficiency in the C++*

programming language at the intermediate/advanced level.

Third programming course in the series of introduction to computer science courses. Data structure concepts in designing and implementing algorithms taught in the C++ programming language. Topics include: recursion, lists, arrays, binary trees, b-trees, AVL trees, heaps, stacks, queues, priority queues, hashing and graphs. Searching, sorting and merging algorithms. Advanced concepts and manipulation of C++ pointers, pointers to functions in C++ class members, functors and advanced pointer arithmetic. At least two programming assignments of 1,500 to 2,500 lines of C++ code will be required of each individual student. At least one two student team project of 3,000 to 4,000 lines of code will be required. **For** STEM Majors: Computer Science, Computer Engineering, Mathematics, and Science majors, but open to all qualified students. Total of 54 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, P

**Course Identification Numbering System (C-ID)*

CS 018 UNIX SCRIPTING WITH BASH**4 units****Prerequisite:** CS 002.

Shell scripting, script parameters, looping, piping, background processing, pattern manipulation, functions, subroutines, process forking, major BASH utilities, AWK scripting. **For** Computer Science, Computer Engineering, Mathematics, and Science majors, but open to all qualified students. Total of 54 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC**Grade Mode:** L, A**CS 020 INDEPENDENT STUDY****1 unit****Prerequisites:** Completion of three other computer science courses.

Individual projects; problem formulation, design, documenting, programming and testing. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.**Grade Mode:** L, A, P**CS 038 INTRODUCTION TO SOFTWARE ENGINEERING****5 units****Prerequisite:** CS 008.

Introduction to the concepts, methods, and current practice of software engineering and the software life cycle. Study of large-scale software production; software life cycle models as an organizing structure; principles and techniques appropriate for each stage of production. Laboratory work involves a group project illustrating these elements. Total of 90 hours lecture.

Transfer Credit: CSU; UC**Grade Mode:** L, A**CS 045 DISCRETE STRUCTURES WITH COMPUTER SCIENCE APPLICATIONS****5 units****Prerequisite:** CS 002.

Specification, development and analysis of algorithms. Sets, relations and functions. Logic and mathematical structures used in computer science. Introduction to combinatorics. Programming projects to exemplify these concepts. **For** Computer Science, Computer Engineering, Mathematics, and Science majors, but open to all qualified students. Total of 72 hours lecture 54 hours laboratory.

Transfer Credit: CSU; UC**Grade Mode:** L, A**CS 066 ASSEMBLY LANGUAGE PROGRAMMING FOR THE SCIENCES AND MATHEMATICS****4 units****Prerequisite:** CS 002.

Number systems and their rules for arithmetic; basic computer organization concepts; register manipulation, pseudocode development; instruction formats, addressing modes, parameter passing using a stack frame; assemblers and linkage editors; modular program design and development. **For** Computer Science, Computer Engineering, Mathematics, and Science majors, but open to all qualified students. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC**Grade Mode:** L, A**CS 080 SEMINAR IN COMPUTER SCIENCE AND COMPUTER ENGINEERING****2 units**

Introduces students to current topics, career paths, and current research topics within Computer Science and Computer Engineering disciplines. **For** Computer Science, Computer Engineering, Mathematics, and Science majors but open to all qualified students. Total of 36 hours lecture.

Transfer Credit: CSU**Grade Mode:** A, P**COSMETOLOGY****(Community Education Center)****COSM 100 INTRO TO COSMETOLOGY****9 units**

Fundamental theory, techniques, and procedures on basic hair, skin, and nail care. Lectures, demonstrations and practical procedures in basic hair, skin, and nail care with emphasis on safely and client protection. Other topics include California State Board of Barbering and Cosmetology rules and regulations, health and safety codes, general science as it relates to cosmetology, infection control, chemistry, and electricity. Total of 81 hours lecture and 243 hours laboratory.

Grade Mode: L, A**COSM 101 HAIRCUTTING****4¹/₂ units****Prerequisite:** COSM 100.

Theory of advanced haircutting techniques and procedures. Lectures, demonstrations and practical procedures in haircutting terminology, safety precautions, disinfection, proper use and handling of cutting implements, and client consultation. Total of 36 hours lecture and 135 hours laboratory.

Grade Mode: L, A**COSM 102 HAIR COLOR****4¹/₂ units****Prerequisite:** COSM 100.

Different types of hair color applications and techniques for various hair color categories. Hands-on workshops with

semi, demi, and permanent hair color to include: special effects hair color applications, lighteners, foiling, weaving/slicing, combination color design patterns, alternation/partial highlights, lowlighting, gray coverage formulations, contrast-zones color patterns, and toner applications. Total of 36 hours lecture and 135 hours laboratory.

Grade Mode: L, A

COSM 103 HAIRSTYLING

4¹/₂ units

Prerequisite: COSM 100.

Theory of professional hairstyling techniques and procedures. Lectures, demonstrations and practical procedures in wet hair styling, thermal styling and long hair styling. Total of 36 hours lecture and 135 hours laboratory.

Grade Mode: L, A

COSM 104 CHEMICAL TEXTURE

4¹/₂ units

Prerequisite: COSM 100.

Theory of professional chemical texturizing techniques and procedures. Lectures, demonstrations and practical procedures in permanent waving, chemical relaxing, and soft curl re-forming. Total of 36 hours lecture and 135 hours laboratory.

Grade Mode: L, A

COSM 105 SKIN CARE

4¹/₂ units

Prerequisite: COSM 100.

Skin disorders and diseases and the different types of skin services offered in the salon. Total of 36 hours lecture and 135 hours laboratory.

Grade Mode: L, A

COSM 106 NAIL CARE

4¹/₂ units

Prerequisite: COSM 100.

Study of nail disorders and diseases and the different types of nail services offered in the salon. Total of 36 hours lecture and 135 hours laboratory.

Grade Mode: L, A

COSM 107 STATE BOARD

4¹/₂ units

Prerequisite: COSM 100.

Preparation for the State Board examination to become licensed cosmetologists. Emphasis is placed on State Board theoretical and practical topics. Total of 36 hours lecture and 135 hours laboratory.

Grade Mode: L, A

COSM 108 PROFESSIONAL DEVELOPMENT

4¹/₂ units

Proper steps to take for seeking employment, customer service, business ethics, marketing, time management, and the advantages and disadvantages of owning a salon or

renting a booth. Total of 36 hours lecture and 135 hours laboratory.

Grade Mode: L, A

COSM 109 SALON

3 units

Prerequisite: COSM 100.

Practical salon experience working on clients. Total of 162 hours of laboratory.

Grade Mode: L, A

COSM 150 INSTRUCTIONAL TECHNIQUES IN COSMETOLOGY

10 units

Prerequisite: State of California Cosmetology License.

Course is designed for licensed cosmetologists who want to become cosmetology instructors. Introduces principles of learning, effective teaching methods and techniques, classroom management, and organizational skills. Emphasis is placed on planning, presenting, and evaluating lessons in both the classroom and clinic/laboratory setting. Total of 80 hours lecture and 240 hours laboratory.

Grade Mode: L, A

COSM 151 INSTRUCTIONAL TECHNIQUES IN COSMETOLOGY

10 units

Prerequisite: COSM 150.

This course is designed for licensed cosmetologists who want to become cosmetology instructors. Continues the principles of learning, effective teaching methods, techniques and organizational skills, and introduces lesson presentation, classroom management and use of technology for curriculum delivery. Emphasis is placed on classroom delivery and evaluation of student performance. Total of 80 hours lecture and 240 hours laboratory.

Grade Mode: L, A

COUNSELING

(Counseling)

COUN 010 INTRODUCTION TO COLLEGE

1 unit

Recommended preparation: Completion of placement assessment.

Designed to help students successfully navigate the higher education system. Understanding of college policies and procedures, campus services and resources and associate degree and transfer requirements. Students will develop an individual educational plan based on their specific academic/career goal(s). **Short term class.** Total of 18 hours lecture.

Transfer Credit: CSU

Grade Mode: L, P

COUN 011 LEARNING STRATEGIES AND COLLEGE SKILLS DEVELOPMENT

1 unit

Analysis of college success factors and learning styles of student achievement. Development of strategies for success in educational and work environments. Organizing tasks involved when studying and the tools to do it. **Short term class.** Total of 18 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

COUN 012 PERSONAL GROWTH AND DEVELOPMENT

3 units

A comprehensive course that integrates personal and professional growth through the development of effective communication skills, positive self-esteem, and strategies for problem-solving and decision-making. Analysis of life course events, self-exploration of social identity and the development of career and educational objectives. Personal health assessment and strategies for coping with stress. Total 54 hours of lecture.

Transfer Credit: CSU

Grade Mode: L, P

COUN 013 PEER MENTORING SKILLS

3 units

Principles and practices of peer mentoring fellow students new to the college setting. Practice basic helping skills along with learning how to utilize knowledge of higher education, matriculation and college success strategies. **No credit** if taken after Coun 103. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

COUN 017 CAREER PLANNING

2 units

Career research and planning using assessments of interests, values, skills, and temperament. Exploration of job duties and educational/training requirements. Job search skills. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

COUN 020 INDEPENDENT STUDY

1 unit

Prerequisite: COUN 010.

Individualized projects, research techniques, written reports. Total of 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: A, P

COUN 030 PERSONAL EXPLORATION OF LEADERSHIP

3 units

Introduction to the fundamental elements of leadership. Exploration of leadership theories and models as well as individual values and beliefs with which to develop a personal philosophy of leadership. Exploration of how the roles of culture, diversity and gender can play in leadership. Application of course content to daily life and leadership contexts. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

COUN 111 EDUCATIONAL PLANNING AND STUDY SKILLS

1/2 unit

Educational planning, study skills and transfer requirements. Testing to identify interests and abilities. **Pass/no pass** grading. Total of 9 hours lecture.

Grade Mode: A, P

COUN 112 STUDENT DEVELOPMENT

1 unit

Effective personal and social relations in the academic and social environment. Problem solving techniques. **Pass/no pass** grading. Total of 18 hours lecture.

Grade Mode: A, P

CULINARY ARTS

(Business and Engineering Technology Division)

CUL 145A INTRODUCTION TO CULINARY ARTS/FOOD SERVICES

10 units

This course introduces the student to basic tool usage and cooking skills that can be applied in any level or type of food service operation. History of the food services industry, sanitation and safety requirements, food terminology through lecture, demonstration and hands-on practice. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

Grade Mode: L, A

CUL 145B INTRODUCTION TO FOOD SERVICES PRODUCTION

10 units

Prerequisite: CUL 145A.

This course is designed to develop skills in garnishing, sauces, soups, and breakfast cookery preparation and presentation. It includes development of recipes and menus for breakfast and lunch service. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

Grade Mode: L, A

CUL 145C QUANTITY COOKING TECHNIQUES

10 units

Prerequisite: CUL 145B.

Designed to develop techniques and skills for cooking for large groups. Emphasis is on menu setup, basic food production including cold and hot buffets, vegetable preparation, entree preparation, and fine dining service. Development of team leadership and supervisory skills. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

Grade Mode: L, A

CUL 145D SPECIAL EVENTS MANAGEMENT

10 units

Prerequisite: CUL 145C.

Event scheduling, training and supervision of food service workers in a dining setting. Banquet, fine dining, and theme events setup and take-down. Food and beverage purchasing, dining ware storage and upkeep, written contract development, and common business practices. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

Grade Mode: L, A

CUL 154A INTRODUCTION TO FOOD SERVICE BAKING AND PASTRY

3 units

Quantity baking for the beginner; quick breads, rolls and fancy pastries. **No credit** if taken after Food 154. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A

CUL 154B ADVANCED BAKING AND PASTRY

3 units

Prerequisite: CUL 154A.

Large quantity baking for the advanced student: designer pastries, tiered and decorated cakes, Artisan breads, and laminated doughs. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A

CUL 158 FIELD PRACTICE IN FOOD SERVICES

4 units

Prerequisite: *Maintain enrollment in 7 units or more including field practice and enrollment in or completion of Culinary Arts course.*

Supervised field experience or employment in food services, on-the-job training with local firm. Total of 360 hours field practice.

Grade Mode: L, A

CUL 160A INTRODUCTION TO CATERING

3 units

Small-scale catering; menu planning, food preparation,

sanitation, food display, party theme presentations; cost analysis, purchasing, legal responsibilities and liabilities and time management. **No credit** if taken after Food 160. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A

CUL 160B ADVANCED CATERING

3 units

Prerequisite: CUL 160A.

Advanced catering technique applications for off-premise services of special occasions for large groups; menu development for gourmet/international foods, specialty desserts, special dietary needs. Catering business strategies; cost analysis, time management, purchasing requirements, legal responsibilities/liabilities, safety and sanitation requirements. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A

DANCE

(Performing and Communication Arts Division)

DANC 002 HEALTH AND FITNESS FOR DANCERS

2 units

Physical, psychological and professional health and fitness issues and needs of dancers and dance related activities. Analysis and exploration of effective training and conditioning, diet and fitness, injury prevention and care, and positive behaviors for career and lifelong wellness. Assessment skills regarding diet and training products and the impact of substance abuse. For dancers and individuals interested (in careers) in dance and dance-related alternatives, including, but not limited to, performance, choreography, teaching, training and physical therapy; open to all students. Total of 36 hours lecture and 18 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

Grade Mode: L

DANC 003 CONDITIONING FOR DANCERS

1 unit

Exercises as mental and physical preparation for dance. Use of floor mat exercises and a floor barre to increase flexibility, balance, strength, body alignment and use of turn out. Relaxation and visualization techniques. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

DANC 004H FLAMENCO DANCE

1 unit

Dance skills and techniques specific to Flamenco Dance and other related folkloric dances of Spain. Practice includes: music, rhythms and accent, instruments and

tonal qualities; body carriage and style; steps, patterns and combinations; variations and whole dances. Historical and multi-cultural aspects of Flamenco dance and music will be considered, discussed, and embodied. Total of 54 hours laboratory.

Transfer credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

DANC 005A SOCIAL DANCE I

1 unit

Skills in popular social dances of the late 19th to mid-20th century, providing a chronological survey. Topics include: Cha Cha, Charleston, Foxtrot, Mambo, Merengue, Polka, Rhumba, Swing, Samba, Salsa, Tango, Waltz. Provides dance students with a strong foundation in partnering skills and proficiency in vernacular genres of American dance, including their cultural and historical origins. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

DANCE 005B SOCIAL DANCE II

1 unit

Intermediate skills in popular social dances of the late 19th to mid-20th century, providing a chronological survey. Topics include: Cha Cha, Charleston, Foxtrot, Mambo, Merengue, Polka, Rhumba, Swing, Samba, Salsa, Tango, Waltz. Trains continuing social dancers in more complex partnering skills, providing further information and experience in vernacular genres of American dance, including their cultural and historical origins. Total of 54 hours laboratory.

Transfer credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

DANC 006A TAP DANCE I

1 unit

Beginning fundamentals of tap dance technique; basic traditional tap steps and combinations, elementary rhythmic and syncopated structures and stylistic patterns. Historical and cultural influences, basic vocabulary of the idiom. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

DANC 006B TAP DANCE II

1 unit

Prerequisite: DANC 006A.

Fundamentals of tap for advanced beginners. Study of traditional steps in various meters and rhythmic styles, with variations and added vocabulary. Increased emphasis on technique and expressive styling. Detailed study of tap history and cultural influences. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

DANC 006C TAP DANCE III

1 unit

Prerequisite: DANC 006B or equivalent.

Intermediate tap technique, with sequences of increased complexity, tempo and duration. Introduction to close-to-the floor dancing and air tricks. Close attention to musicality, styling and carriage of the arms and upper body. Participation in concert performance. Total of 54 hours laboratory.

Transfer credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

DANC 006D TAP DANCE IV

1 unit

Prerequisite: DANC 006C or equivalent.

Intermediate and advanced tap technique, with continued emphasis on showmanship and the expression of narrative through dance. Close attention to musicality, styling and carriage of the arms and upper body. Introduction to further tricks and to improvisation. Creation of a concert piece for performance. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

DANC 008A BEGINNING COMPOSITION AND CHOREOGRAPHY

2 units

Recommended Preparation: DANC 009A, 011A, 014A, or 015A, or the equivalent.

Introduction to the elements and basic principles of dance composition and choreography and their application to all styles of dance, including, but not limited to ballet, ethnic, jazz, modern and tap; exploration and experimentation through lectures, improvisation and problem solving with varied literal and nonliteral themes, differing forms, working methods and processes, musical forms and alternative accompaniments in order to design and create movement phrases and compositions for individual and group arrangements. Final projects presentation/performance. Total of 18 hours lecture and 54 hours laboratory.

Transfer credit: CSU; UC

Grade Mode: L

DANC 008B INTERMEDIATE COMPOSITION AND CHOREOGRAPHY

2 units

Prerequisite: DANC 008A.

Exploration and application of compositional elements in designing and creating movement phrases and compositions of greater length and complexity with emphasis on technique and presentation; experimentation with self-constructed/designed accompaniment of nontraditional style including sounds, silence, voice, words and phrases. Solo or group composition presentation/performance. Total of 18 hours of lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

DANC 009A MODERN DANCE I**1 unit**

An introduction to the art and discipline of modern dance technique through fundamental skills and beginning technique practices. Emphasis is on awareness of the body as an expressive instrument. Study and practice of the basic dance elements of space, time and energy are engaged through movement combinations, traveling in space, floor and center work and creative exploration. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

DANC 009B MODERN DANCE II**1 unit**

Prerequisite: DANC 009A.

The study of the art and discipline of modern dance technique at an advanced beginning level. Emphasis is placed on developing the body as an expressive instrument, focusing on technical skills and aesthetic concepts. Increasing complexity in movement phrasing, dynamics, spatial clarity, musicality and creative exploration is introduced. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

DANC 009C MODERN DANCE III**1 unit**

Prerequisite: DANC 009B.

Intermediate modern dance; explores the craft of contemporary modern dance technique at an intermediate level. Emphasis is on increasingly complex movement material including floor and aerial work, spatial clarity and design, energy dynamics, alignment, rhythmic abilities, musicality, elements of choreographic composition and performance qualities. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

DANC 009D MODERN DANCE IV**1 unit**

Prerequisite: DANC 009C.

Advanced technique skills in contemporary modern dance; emphasis is focused on the dancer as "artist" with continuing development of dynamic articulation of the body in motion, physicality, expressivity and presence. Enhanced experiences in the observation and analysis of movement, as well as elements of choreography and staging are explored. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

DANC 010 MODERN DANCE PRODUCTION**2 units**

Recommended preparation: Audition or completion of DANC 009C.

Participation in dance performance and staging. **Maximum credit** 8 units, 2 units each semester. **Maximum of 4 enrollments** in the **Dance Production Family:** DANC 010, 022AB. Total of 108 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

DANC 011A BALLET I**1 unit**

Beginning level Classical Ballet technique emphasizing proper placement and alignment, use of turn-out, musicality, quality of movement, a creative approach to learning the art-form, self-awareness, artistry, and expression. **Recommended** previous dance experience. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

DANC 011B BALLET II**1 unit**

Prerequisite: DANC 011A.

Second level Beginning Classical Ballet technique emphasizing proper placement and alignment, use of turn-out, musicality, quality of movement, a creative approach to learning the art-form, self-awareness, artistry, and expression. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

DANC 011C BALLET III**1 unit**

Prerequisite: DANC 011B.

Development of intermediate level ballet technique and artistry. Emphasis on technique and combinations of increasing complexity and duration, leading to greater endurance, control, and progressively refined, artistic, and dynamic execution and performance. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

DANC 011D BALLET IV**1 unit**

Prerequisite: DANC 011C.

Second level Intermediate Classical Ballet. Continues to emphasize proper placement and technique while performing steps that have greater difficulty and combinations that have greater complexity. Continued development of an integrated and embodied experience of musicality, artistry, expression, and the performance skills and strength that prepare

students for advanced work. Total of 54 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

DANC 012 IMPROVISATION

1 unit

Improvisation in dance and choreography. For all levels of dance. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

DANC 013 PILATES-BASED METHOD FOR ALIGNMENT AND CORRECTION

1 unit

Alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates. Mat work with emphasis exercises on improved body alignment, strength, flexibility, control, coordination and breathing. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

DANC 014A HIP HOP DANCE I

1 unit

Foundations of hip hop dance, including basic vocabularies, style, rhythms and cultural conventions of the urban and popular genre. Includes daily warm-ups, phrases, dances and opportunities to "freestyle," using footwork, coordinations, gestures, patterns and floor work typical of hip hop dance. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

DANC 014B HIP HOP DANCE II

1 unit

Prerequisite: DANC 014A.

Intermediate level hip hop dance, including more complex vocabularies, styles, rhythms and cultural conventions of the urban and popular genre. The class may include daily warm-ups, phrases, dances and opportunities to "freestyle," using footwork, coordinations, gestures, patterns and floor work typical of hip hop dance. The course will consider Hip Hop as a global cultural phenomenon, highlighting it as part of the African Diaspora, techno culture, and mass entertainment. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

DANC 015A JAZZ DANCE I

1 unit

Techniques, steps, combinations and routines in jazz dance to develop muscular control, endurance and flexibility. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

DANC 015B JAZZ DANCE II

1 unit

Recommended preparation: DANC 015A.

Intermediate techniques, steps, combinations and routines in jazz dance. Dance studies of the elements of movement: form, rhythm, space and expression. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

DANC 015C JAZZ DANCE III

1 unit

Prerequisite: DANC 015B or equivalent.

Intermediate study of jazz dance techniques and composition. Development of muscular control, endurance and flexibility at an intermediate level. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

DANC 015D JAZZ DANCE IV

1 unit

Prerequisite: DANC 015C or equivalent.

Advanced study of jazz dance techniques and composition. Development of muscular control, endurance and flexibility at an advanced level. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

DANC 020 INDEPENDENT STUDY

1 unit

Prerequisite: Completion of two dance courses and approval of student project.

Individual projects relating to dance including, but not limited to research, written reports or papers, community project, choreography, demonstration, master class, recital or concert. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

DANC 021A DANCE HISTORY: CULTURAL AND SOCIAL HERITAGE

3 units

Survey of world dance forms, including analysis of styles, forms and roles of dance in diverse cultures, from earliest rituals to contemporary and global developments. Examination of folk, popular, theatrical and social dance traditions and evaluation as these forms relate to geography, folklore, cultural identity, aesthetics, and social values. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

DANC 021B DANCE HISTORY: SPECTACLE AND PERFORMANCE ART

3 units

Survey of dance as performance and art form in varying cultural and historical contexts, including spectacle, theater and theatricals, entertainment, performance and concert art; dance as literature, criticism, theory and choreographic design; relationship to other art forms; study of prominent and influential choreographers, productions, performers and writers and collaborative projects with composers and artists. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

DANC 022A DANCE PERFORMANCE I

2 units

Recommended preparation: Completion of one or more technique courses: DANC 009A or DANC 011A or DANC 015A; and completion of or enrollment in and DANC 008A.

Enrollment Limitation: Retention based on successful audition.

Development and staging of original student dance compositions culminating dance performance/s. Emphasis is placed on development of performance skills. Cultivation of personal artistry as a performer and choreographer. Requires participation in a dance performance. **Maximum credit** 4 units, 2 units each semester. **Maximum of 4 enrollments** in the **Dance Production Family:** DANC 010, 022AB. Total of 108 hours laboratory and 36 hours by arrangement. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

DANC 022B DANCE PERFORMANCE II

2 units

Prerequisite: DANC 022A.

Enrollment Limitation: Retention based on successful audition.

Creation, development and staging of original student dance compositions presented in a culminating dance performance/s. Development and refinement of performance skills. Cultivation of personal artistry as a performer and choreographer. Requires participation in a dance performance. **Maximum credit:** 4 units, 2 units each semester. **Maximum of 4 enrollments** allowed in the **Dance Production Family:** DANC 010, 022AB. Total 108 hours laboratory and 36 hours by arrangement. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

DANC 023 DANCE REPERTOIRE

1 unit

Recommended Preparation: Previous dance experience.

Enrollment Limitation: Audition.

Participate as a dancer in an original or repertoire dance piece under the direction of a professional choreographer (including guest artists and PCC dance faculty). Provides intermediate and advanced-level dance students the opportunity to engage in a variety of professional choreographic and rehearsal practices, being involved in artistic processes from inception through completion. Intermediate and advanced dancers will be expected to work as collaborators of an ensemble, practicing professionalism within rehearsals and final productions. Dance styles may include modern, postmodern, contemporary, jazz, hip hop, tap, ethnic dance styles, and more. Dancers will need to audition for each professional choreographer at the start of the semester. **Maximum credit:** 4 units, 1 unit each semester. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

DANC 025 MOVEMENT FOR CHILD DEVELOPMENT

2 units

Survey of movement teaching techniques, activities and experiences that promote child growth and development from infancy through age eight. Focus is on development of the whole child, enhancing the physical, cognitive and social/emotional domains, through creative, non-competitive movement activities. Child developmental theory, principles and movement practices are engaged. Total of 27 hours lecture and 27 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

DANC 026 MUSIC FOR DANCE

2 units

Historical relationship between music and dance, including exposure to major genres and traditions of dance music. Strategies for listening, embodying, and pairing dance with music. Basic music production techniques, copyright law, and sound effects. Develops musicality in dance, in preparation for choreographing with music, dance teaching, and working with composers. Total of 27 hours lecture and 27 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L

DENTAL ASSISTING

(Health Sciences Division)

DA 100 DENTAL MATERIALS

3 units

Corequisite: Enrollment in or completion of DA 123A.

Enrollment Limitation: Enrollment in Dental Assisting program.

Composition, characteristics, physical properties and uses of metallic alloys and non-metallic agents such as gypsum, cements, aesthetic restorations, impression materials and

new products currently used in dentistry. Includes practical laboratory experiences and chairside procedures involved in the use of these materials. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L

DA 108 INFECTION CONTROL IN DENTISTRY

2 units

Enrollment Limitation: *Enrollment in the Dental Assisting program.*

Introduction to microbiology, infectious diseases, immunity, infection control in the dental office, agencies concerned with disease control, OSHA standards and guidelines and hazard communication management. Review of current rules and regulations as outlined by the Dental Practice Act. This course meets the eligibility requirements for the certificate in Infection Control and the California Dental Practice Act required by the state for unlicensed Dental Assistants. Total of 36 hours lecture and 18 hours laboratory.

Grade Mode: L

DA 110 INTRODUCTION TO DENTAL ESSENTIALS

3.5 units

Enrollment Limitation: *Enrollment in the Dental Assisting program.*

Introduction to dental essentials, to include the oral cavity, bones of the face, fundamentals of preventive dentistry, vital signs, principles of professionalism, the dental health team and selected dental office lab procedures. Total of 54 hours lecture and 27 hours laboratory.

Grade Mode: L

DA 111 APPLIED HUMAN BEHAVIOR

2 units

Prerequisite: *Enrollment in Dental Assisting program.*

Principles of applied human behavior, psychology and interpersonal communication in diverse settings. Total of 36 hours lecture.

Grade Mode: L

DA 120 INDEPENDENT STUDY

1 unit

Enrollment Limitation: *Acceptance into the Dental Assisting Program and program director approval.*

Participation in clinical activities, projects, research, etc. including experience in clinical and preclinical or simulated practice settings, practical laboratory projects/assignment, lecture attendance, literature review and community projects. Total of 54 hours laboratory.

Grade Mode: L, P

DA 123A CHAIRSIDE TECHNIQUES

4.5 units

Corequisite: *Enrollment in or completion of DA 100, 108, and 110.*

Enrollment Limitation: *Acceptance in the Dental Assisting Program.*

Chairside techniques to include infection control, basic medical and dental emergencies, cavity classification and design, dental charting, rotary and hand instruments, tray set-ups and procedures, oral vacuum and triplex syringe use, instrument exchange, dental dam placement and removal, matrix retainer placement and removal, four-handed dentistry techniques, anesthetic syringe oral inspection and medical history procedures. Practical application of preclinical/clinical techniques in patient management. Total of 36 hours lecture and 144 hours laboratory.

Grade Mode: L

DA 123B ADVANCED CHAIRSIDE TECHNIQUES

4 units

Prerequisite: *DA 123A.*

Corequisite: *DA 135.*

Enrollment Limitation: *Acceptance in the Dental Assisting Program.*

Application of advanced dental assisting chairside techniques, principles of anesthesiology, pharmacology and dental therapeutics, product evaluation and dental specialties. Total of 54 hours lecture and 72 hours laboratory.

Grade Mode: L

DA 124 DENTAL OFFICE ADMINISTRATION

3 units

Enrollment Limitation: *Enrollment in the Dental Assisting program.*

Dental office skills aimed at developing the dental assistant's abilities related to dental office administration. Course will include but not be limited to the following didactic and laboratory instruction: business aspects of dentistry, dental team employees, patient management, legal and ethical issues, technology, office design and equipment used in dentistry. Total of 54 hours lecture and 18 hours laboratory.

Grade Mode: L

DA 125 CLINICAL EXPERIENCE I

2 units

Prerequisite: *DA 123A.*

Enrollment Limitation: *Enrollment in the Dental Assisting program.*

Clinical experience(s) to include but not limited to: chairside skills and techniques, new technology, and specialty practices. Students must provide their own transportation and meet all the clinical guidelines. **Pass/no pass** grading. **Six weeks.** Total of 9 hours lecture and 87 hours laboratory.

Grade Mode: P

DA 127 CLINICAL EXPERIENCE II**6.5 units**

Prerequisites: *All of the following: DA 100, 123A, 140; and enrollment in or completion of DA 135.*

Application of academic knowledge, communication and technical skills to the dental office workplace environment. Weekly clinical seminar, evaluations and related work experiences include but not limited to using basic and advanced chairside assisting skills and procedures, radiology techniques, and manipulation of dental materials. The students will be assigned to general and specialty dental offices and clinics and meet regularly to discuss experiences, work ethics and other topics related to employment. Total of 18 hours lecture and 306 hours field/clinical.

Grade Mode: L

DA 135 REGISTERED DENTAL ASSISTANT TECHNIQUES**3 units**

Prerequisite: *DA 140.*

Corequisite: *Enrollment in or completion of DA 123B.*

Enrollment Limitation: *Acceptance in the Dental Assisting Program.*

Laboratory, preclinical and, where appropriate, clinical practice in a variety of functions delegated to the dental assist and the registered dental assistant. Meets the requirements of the Dental board of California for completion of all designated Registered Dental Assisting duties in addition to coronal polish, pit and fissure sealant application and Ultrasonic scaling for orthodontic band cement removal. Emphasis is placed on the practical application and technical abilities of each task, critical thinking, communication, ethical responsibilities, competency of performance and a demonstrated concern for patient health and safety. Total of 36 hours of lecture and 72 hours of laboratory.

Grade Mode: L

DA 140 ORAL RADIOLOGY**4 units**

Prerequisite: *Enrollment in or completion of DA 110 and 108.*

Theory and basic principles of intraoral and extraoral radiography; characteristics and methods of controlling X-radiation; hazards of radiation; infection control and safety procedures. Laboratory and clinical experience on selected patients; care and operation of dental X-ray unit; dental images, placement and exposure techniques. Identification and interpretation of radiographs. Course meets and is approved by the Dental Board of California for Radiation Safety. Total of 36 hours lecture and 108 hours laboratory.

Grade Mode: L

DA 142 ADVANCED ORAL RADIOLOGY TECHNIQUES **$\frac{1}{2}$ unit**

Prerequisite: *DA 140.*

Enrollment Limitation: *Enrollment in the Dental Assisting program.*

Advanced theory and specialized principles of intraoral radiography techniques to include but not limited to: digital, endodontic, pedo, film placement, processing and exposure techniques. **Six weeks.** Total of 9 hours lecture and 9 hours laboratory discussion.

Grade Mode: L

DA 149 ORTHODONTIC ASSISTANT**2.5 units**

Designed to provide advance education in orthodontic training for the Registered Dental Assistant or Dental Assistant currently working in an Orthodontic practice setting. Meets the didactic and laboratory requirements by the Dental Board of California Orthodontic Assisting Permit course approval. Specialty Clinical Experience. Students must provide verification of RDA license and/or 6 months' work experience as a Dental Assistant; Hepatitis B immunization records OR HBV Refusal form; TB Test Result; CPR certification, 8 hour Infection Control and 2 hour Dental Practice Act or RDA license on the first day of class. Total of 36 hours lecture and 36 hours laboratory.

Grade Mode: P

DA 150 CLINICAL EXPERIENCE IN A SPECIALTY PRACTICE **$\frac{1}{2}$ unit**

Prerequisite: *DA 149 or DA 123B.*

Enrollment Limitation: *Enrollment in or completion of the Dental Assisting Program.*

Clinical instruction designed to provide students with the required clinical hours associated with working in an orthodontic office or other specialty office under the instructors' supervision. Students will be required to attend an orientation and complete assigned hours in an approved clinical site. Total of 28 hours of clinical laboratory.

Grade Mode: L, P

DA 160 COMPREHENSIVE DENTAL ASSISTING EXAM REVIEW **$\frac{1}{2}$ unit**

Prepares the dental assistant with a comprehensive review of dental assisting functions, infection control standards, radiation safety, dental assisting and registered dental assisting duties. Practice and reinforcement of exam material. Includes but not limited to selected DA/RDA duties and functions. Total of 9 hours lecture.

Grade Mode: P

**DA 161 COMPREHENSIVE DENTAL ASSISTING
PRACTICAL EXAM REVIEW**

½ unit

Prepares the dental assistant with a comprehensive review of dental assisting functions, infection control standards, dental assisting, and registered dental assisting duties. Practice and enforcement of technical skills include but not limited to selected DA/RDA duties and functions. Total of 27 hours laboratory.

Grade Mode: P

DA 200A DENTAL ASSISTING LAB

1 unit

Enrollment Limitation: *Enrollment in the Dental Assisting program.*

Refinement of basic dental assisting skills, techniques and concepts in a laboratory or clinical setting. Total of 54 hours laboratory.

Grade Mode: L

**DA 200B DENTAL ASSISTING TECHNICAL SKILLS
ENHANCEMENT LAB**

1 unit

Prerequisite: DA 200A.

Enrollment Limitation: *Enrollment in the Dental Assisting program.*

Enhance advanced level of dental assisting skills, techniques and concepts in a laboratory, preclinical, or clinical setting. Total of 54 hours laboratory.

Grade Mode: L

DENTAL HYGIENE

(Health Sciences Division)

DH 101A FUNDAMENTALS OF DENTAL HYGIENE

5 units

Corequisites: DH 109, DH 117, ANAT 115.

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Orientation and role of the dental hygienist in maintaining oral health. Introduction to dental hygiene procedures and techniques. Selected services on patients, partners and/or laboratory manikins. Emphasis on the United States Occupational Safety and Health Administration Rules and Regulations and infection control in the dental office. Total of 36 hours lecture and 162 hours laboratory.

Grade Mode: L, A

**DH 101B FUNDAMENTALS OF DENTAL HYGIENE
THEORY AND PRACTICE**

5 units

Corequisites: DH 105 and 116.

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Fundamentals of Dental Hygiene Theory and Practice including preventive, educational and therapeutic services provided by the dental hygienist. Practical application on selected patients. Total of 36 hours lecture and 162 hours laboratory.

Grade Mode: L

**DH 104A CLINICAL DENTAL HYGIENE THEORY AND
PRACTICE: PAIN CONTROL**

2 units

Prerequisite: DH 101B.

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Clinical application of dental hygiene theory and practice with primary emphasis on pain control. Assessment of patient needs to determine the use of pain control methods. Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: L

**DH 104B CLINICAL DENTAL HYGIENE THEORY AND
PRACTICE**

7 units

Prerequisite: DH 104A.

Corequisites: DH 108, 113A and 119A.

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Clinical application of dental hygiene Theory and Practice including assessment of patient needs, treatment planning, pain control, oral disease control, delivery and evaluation of preventive, educational and therapeutic services, to an intermediate level of performance. Total of 36 hours lecture and 270 hours laboratory.

Grade Mode: L

**DH 104C ADVANCED CLINICAL DENTAL HYGIENE
THEORY AND PRACTICE**

7 units

Prerequisite: DH 104B.

Integration of Dental Hygiene Theory and Practice into preventive, educational and therapeutic care to clinical competency on a diverse range of patients. Advanced techniques and procedures. Total of 36 hours lecture and 270 hours laboratory.

Grade Mode: L

DH 105 PATHOLOGY

3 units

Corequisites: DH 101B.

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Principles of general pathology, with special emphasis on oral pathology. Total of 54 hours lecture.

Grade Mode: L

DH 107 INTRODUCTION TO ORAL HEALTH RESEARCH

2 units

Prerequisites: DH 101B and 109.

Enrollment Limitation: Acceptance into the Dental Hygiene program.

Designed to provide students with the skills necessary to critically evaluate current product research information and scientific literature as it relates to the practice of dental hygiene. Students will be encouraged to pose their own research questions, design and present research projects and evaluate research. Total of 36 hours lecture.

Grade Mode: L

DH 108 PHARMACOLOGY

2 units

Corequisites: DH 104B, 113A, and 119A.

Enrollment Limitation: Acceptance into the Dental Hygiene program.

Basic principles of pharmacology, pharmacokinetics, toxicology and pharmacodynamics. Pharmacology of drugs used in dentistry, drug interactions and medical emergencies. Total of 36 hours lecture.

Grade Mode: L

DH 109 DENTAL HEALTH EDUCATION, COMMUNICATION AND DIVERSITY

2 units

Corequisites: DH 101A, DH 117, and DH 122.

Enrollment Limitation: Acceptance into the Dental Hygiene program.

Principles of communication and learning for the dental health professional. Patterns of human development, cultural pluralism and health behaviors. Health education strategies. Total of 36 hours lecture.

Grade Mode: L

DH 111 CURRENT ISSUES IN DENTAL HYGIENE

2 units

Corequisites: DH 104C, 113B and 121.

Enrollment Limitation: Acceptance into the Dental Hygiene program.

Ethics and jurisprudence in dentistry, professional relations and responsibilities, dental hygiene practice management, trends and current issues in dental hygiene. Total of 36 hours lecture.

Grade Mode: L

DH 113A PERIODONTICS

2 units

Corequisites: DH 104B, 108, and 119A.

Enrollment Limitation: Acceptance into the Dental Hygiene program.

Normal periodontium, gingival and periodontal diseases, types and degrees of periodontal disease, therapy and maintenance. Total of 36 hours lecture.

Grade Mode: L

DH 113B ADVANCED PERIODONTICS

1 unit

Corequisites: DH 104C, 111, and 121.

Enrollment Limitation: Acceptance into the Dental Hygiene program.

Advanced topics in clinical periodontology. Diagnosis of and influences on disease activity, emergencies, treatment modalities, maintenance and legal aspects. Total of 18 hours lecture.

Grade Mode: L

DH 116 DENTAL MATERIALS

2 1/2 units

Corequisites: DH 101B, 105 and 141.

Composition, characteristics, physical properties and uses of dental non-metallic and metallic agents; practical laboratory and clinical applications involved in the use of these materials. Total of 36 hours lecture and 36 hours laboratory.

Grade Mode: L, A

DH 117 DENTAL MORPHOLOGY AND OCCLUSION

2 units.

Corequisites: ANAT 115, DH 101A and DH 109.

Enrollment Limitation: Acceptance into the Dental Hygiene program.

Oral terminology, dental anatomy and root morphology with emphasis on the relationships of form, function and occlusion. Includes laboratory experience in instrument adaptation to root morphology, pulp vitality testing as related to RDH duties of the California Dental Practice Act. Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: L

DH 119A COMMUNITY DENTAL HEALTH

2 units

Enrollment Limitation: Acceptance into the Dental Hygiene program.

Principles, objectives and techniques of oral disease prevention and control; oral health promotion through organized community efforts. Includes epidemiology, literature review, planning, implementation and evaluation of a community-based oral health program. **Required** instructional trips. Total 36 of hours lecture.

Grade Mode: L, A

DH 120 INDEPENDENT STUDY

1 unit

Enrollment Limitation: Enrollment in the Dental Hygiene program and Program Director approval.

Participation in research and various clinical project including experience in clinical or simulated practice settings, practical laboratory assignment, lecture attendance, literature review and community projects. Total of 54 hours laboratory.

Grade Mode: L

DH 121 CLINICAL PRACTICE IN ALTERNATIVE SETTINGS

1 unit

Prerequisite: DH 104A.

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Practicum at an intermediate level in dental hygiene in non-traditional settings. Includes institutional, management and community health experiences. Emphasis on dental hygienist as educator, resource professional and provider in dental care delivery. **Maximum credit** 2 units, 1 unit each semester. Total of 85 hours field practice.

Grade Mode: L

DH 122 MEDICAL EVALUATION OF DENTAL HYGIENE PATIENTS

2 units

Corequisites: DH 101A and 109.

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Dental management of medically compromised patients. Emphasis placed on patient assessment, treatment planning, patient management, patient motivation and interpersonal communications of medically compromised patients, special needs patients, and geriatric patients. Total of 36 hours lecture.

Grade Mode: L

DH 141 ORAL RADIOLOGY

3 units

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Theory and basic principles of intraoral and extraoral radiographs; characteristics and methods of controlling X-radiation; hazards of radiation; safety procedures. Laboratory and clinical experience in care and operation of the dental X-ray unit; processing, mounting films. Intraoral film placement and exposure techniques; use of film holders. Extraoral exposure techniques. Identification and interpretation of radiographs. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L

DH 200A DIRECTED STUDIES IN CLINICAL DENTAL HYGIENE

1 unit

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Development of dental hygiene clinical skills in a laboratory or clinical setting at the introductory level. **Pass/no pass** grading. Total of 54 hours laboratory.

Grade Mode: P

DH 200B ADVANCED TECHNIQUES IN CLINICAL DENTAL HYGIENE

1 unit

Enrollment Limitation: *Acceptance into the Dental Hygiene program.*

Development of dental hygiene clinical skills at a competent level in a clinical setting. **Pass/no pass** grading. Total of 54 hours laboratory.

Grade Mode: P

DH 200C CLINICAL BOARD PREPARATION

1 unit

Enrollment Limitation: *Acceptance into the dental hygiene program.*

Development of clinical skills in a clinical setting as related to the clinical board examinations. **Pass/no pass** grading. Total of 54 laboratory.

Grade Mode: P

DH 201 DENTAL HYGIENE SKILLS ENHANCEMENT LAB

1 unit

Enrollment Limitation: *Acceptance into the Dental Hygiene Program.*

Provides students enrolled in the Dental Hygiene Program the opportunity to enhance their clinical skills and provide support services required by the State Dental Practice Act and the Dental Hygiene Committee of California. Total of 54 hours laboratory.

Grade Mode: P

DENTAL LABORATORY TECHNOLOGY

(Health Sciences Division)

DLT 109 DENTAL MATERIALS

2 units

Corequisites: DLT 113B, 114B.

The history of dentistry, its beginnings and progress to date. The composition, characteristics and uses of non-metallic agents such as gypsum products, waxes, resins, impression materials and polishing compounds; metallic agents such as gold and chromium-cobalt alloys. A comprehensive study of the chemical, physical and biological requirements of modern day dental materials. Total of 36 hours lecture.

Grade Mode: L, A

DLT 113A DENTURE TECHNIQUES**4 units****Corequisites:** *DLT 114A, 115, 116A.*

Theory and fundamental applied techniques for constructing preliminary and master casts to include: the applications of autopolymerizing and heat cured acrylic resins, custom trays, record bases and occlusion rims; articulation utilizing semi-adjustable articulators in fabrication of balanced complete dentures (maxillary and mandibular) encompassing: tooth-set-up, working/balancing contacts, and waxing procedures. Total of 36 hours lecture and 108 hours laboratory.

Grade Mode: L, A, P**DLT 113B DENTURE TECHNIQUES****4 units****Prerequisite:** *DLT 113A, or the equivalent knowledge and experience.***Corequisites:** *DLT 109 and 114B.*

Theory and applied techniques for processing balanced complete dentures to include: investing, boil-out, packing, curing, recovery, remounting, selective grinding and finishing/polishing procedures. Semi-adjustable articulators will be employed during these steps. Perform procedures to repair individual teeth and denture bases utilizing cold cure techniques. Reline and rebase ill-fitting complete dentures. Fabricate a surgical splint for immediate dentures. Total of 36 hours lecture and 108 hours laboratory.

Grade Mode: L, A, P**DLT 114A CROWN AND BRIDGE****4 units****Corequisites:** *DLT 113A, 115, 116A.*

Professional relationships of the dental team. Theory and fundamental applied techniques for inlay and crown construction; model and die fabrication, articulation, wax up, direct spruing and investing, of single inlays, crowns and onlays. Basic study of occlusion, tooth contour and anatomy. Total of 36 hours lecture and 108 hours laboratory.

Grade Mode: L, A**DLT 114B CROWN AND BRIDGE****4 units****Prerequisite:** *DLT 114A, or the equivalent knowledge and experience.***Corequisites:** *DLT 109, 113B.*

Theory and applied techniques for crown and bridge construction. Application of procedural steps in the lost wax process, casting and finishing both single and multi-unit restorations. Principles of bridge design. Study of bridge components. Design and construction of the broken stress bridge and post crown restoration. Application of procedural steps for gold soldering. Study of tooth form and

functional occlusion utilizing a full arch model and semi adjustable articulator. Total of 36 hours lecture and 108 hours laboratory.

Grade Mode: L, A**DLT 115 DENTAL MORPHOLOGY** **$\frac{1}{2}$ unit****Corequisites:** *DLT 113A, 114A and 116A.*

Fundamentals of anatomical and physiological structure affiliated with cranial, facial and intraoral anatomy in relation to construction of fixed and removable prosthetic devices. Inclusive of bone, muscle and tooth structure interrelated movements. Total of 9 hours lecture.

Grade Mode: L, A**DLT 116A BEGINNING DENTAL ANATOMY** **$\frac{1}{2}$ units****Corequisites:** *DLT 113A, 114A and 115 and 200A.*

Relationship of tooth form and function to dental health. Basic principles of occlusion, introduction to Cusp-to-Fossa and Cusp-to-Occlusal Embrasure occlusal schemes. Related nomenclature. Wax carving exercises of 14 teeth. Total of 9 hours lecture and 54 hours laboratory.

Grade Mode: L, A**DLT 116B INTERMEDIATE DENTAL ANATOMY** **$\frac{1}{2}$ units****Prerequisite:** *DLT 116A or the equivalent knowledge and experiences.***Corequisite:** *DLT 200B.*

Intermediate dental anatomy principles to include studies in Cusp-to-Fossa and Cusp-to-Occlusal Embrasure occlusal schemes. Emphasis shall be on maxillary and mandibular molars. Axial and occlusal features unique to the molar group of teeth. Posterior tooth nomenclature. Wax carving exercises of selected molars and mounting of study models. **Short term class.** Total of 9 hours lecture and 54 hours laboratory.

Grade Mode: L, A**DLT 116C ADVANCED DENTAL ANATOMY** **$\frac{2}{2}$ units****Prerequisite:** *DLT 116B, or the equivalent knowledge and experiences.***Corequisites:** *DLT 109, 113B, 114B and 200C.*

An intense study of anterior and posterior tooth anatomy. Detailed sculpting of anterior and posterior teeth in wax carving blocks and on study models mounted to an articulator. Includes anatomic tooth drawings of posteriors. Special emphasis on individual tooth contour and detailed occlusal anatomy. Total of 27 hours lecture and 54 hours laboratory.

Grade Mode: L, A

DLT 116D HIGHLY ADVANCED DENTAL ANATOMY**2½ units****Prerequisite:** *DLT 116C, or the equivalent knowledge and experiences.***Corequisites:** *DLT 117, 118A, 119A, and 201A.*

Knowledge and skills acquired in DLT 116A, B, and C as well as all other first year dental technology courses shall be expanded in this course. Studies of various occlusal records such as pantographs, axiographs, check bites, transfer models and various facebows, as well as various occlusal schemes. Focus on functional movement, esthetics, and advanced instrumentation. Principles of occlusal equilibration. Gnathological principles including occlusal determinants. Related nomenclature. Precision waxing techniques. Total of 27 hours lecture and 54 hours laboratory.

Grade Mode: L, A**DLT 117 ORTHODONTICS AND PEDODONTICS****2 units****Prerequisite:** *DLT 119A; or the equivalent knowledge and experience.***Corequisites:** *DLT 118B, 119B, 124, 125.*

Basic principles and applied technical procedures in the construction of orthognathic study casts and orthodontic appliances with emphasis on design and wire contouring of various types of arch wires, clasps and springs. Autopolymerizing acrylic resin processing procedures, soldering and minor repairs. Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: L, A**DLT 118A CERAMICS****4 units****Prerequisite:** *DLT 116A or the equivalent.***Corequisites:** *DLT 116B, 119A.*

Theory and fundamental applied techniques for model and die preparation and cast evaluation. Design and construction of the single unit ceramic alloy framework. Opaque procedures; porcelain manipulation; basic shade control; firing cycles; shaping and glazing single unit ceramic restorations utilizing metal ceramic technology. Total of 36 hours lecture and 108 hours laboratory.

Grade Mode: L, A**DLT 118B ADVANCED CERAMICS****6 units****Prerequisite:** *DLT 125, or the equivalent knowledge and experiences.***Corequisites:** *DLT 119B, 124, 126, and 201C.*

Theory and applied techniques for constructing metal ceramic restorations for crowns and multi-unit fixed partial dentures. Multi-unit framework design, various porcelain build-up techniques, extrinsic and intrinsic staining, cor-

rections and additions. Fabrication of porcelain shoulder margin and porcelain laminate veneer. Instruction in both pre and post soldering, and trouble-shooting. Principles of color theory, usage of the shade guide, and esthetic considerations. Introduction of all-ceramic restorations and dental implants. Total of 45 hours lecture and 189 hours laboratory.

Grade Mode: L, A**DLT 119A PARTIAL DENTURES****4 units****Prerequisite:** *DLT 116A, or the equivalent knowledge and experience.***Corequisites:** *DLT 116B, 118A.*

Theory and fundamental applied techniques in the construction of gold and nickel-chromium partial dentures to include: elementary principles of survey and design, model preparation and refractory cast production. Technique and procedural application of preformed patterns, spruing, investing, casting and finishing metal frameworks. Total of 36 hours lecture and 108 hours laboratory.

Grade Mode: L, A**DLT 119B PARTIAL DENTURES****2 units****Prerequisite:** *DLT 119A, or the equivalent knowledge and experience.***Corequisites:** *DLT 117, 118B, 124 and 125.*

Theory and applied advanced techniques in the construction of nickel-chromium cast partial dentures. Engineering principles in the design of tooth/tissue borne and tooth borne removable partial denture prosthesis to include: repairs, arrangement of artificial teeth, wax-up, processing and finishing of partial denture bases. Total of 9 hours lecture and 81 hours laboratory.

Grade Mode: L, A, P**DLT 120 INDEPENDENT STUDY****1 unit****Prerequisite:** *DLT 113A.*

Research or clinical project including experience in clinical practice settings, practical laboratory assignment, lecture attendance, literature review and community projects. Total of 54 hours laboratory.

Grade Mode: L, A**DLT 124 DENTAL LABORATORY MANAGEMENT****2 units****Corequisites:** *DLT 117, 118B, 119B, 125.*

Ethics and laws governing professional relationships of dentists and dental technicians. Study of human resource management, decision making, written communication, resume and interview preparation. Organization of a new dental laboratory business; marketing and research, labo-

ratory design, business forms, equipment, supplies, purchasing, staffing and inventory management. Development of a business plan. Introduction to the computer in a laboratory environment. Professional organizations. Certified Dental Technician (CDT), and Recognized graduate (RG) Programs. Total of 36 hours lecture.

Grade Mode: L, A

DLT 125 CLINICAL EXPERIENCE

3½ units

Prerequisite: *DLT 116D, or the equivalent knowledge and experience.*

Corequisite: *DLT 201B.*

Advanced skills in applied dental laboratory technology. Clinical experience in a commercial dental laboratory or dental laboratory setting where practical experience in dental laboratory techniques may be obtained. Fabrication of prostheses for patients currently under treatment, or from actual casts or impressions and occlusal records from previously fabricated prostheses. Completion of a personal portfolio to include resume, sample letters, sample projects, photographs, and letters of recommendation. Completion of the Cost-of-Living Report. Students will need to provide their own transportation to field laboratory sites. **Pass/no pass** grading. **Short term course.** Total of 27 hours lecture and 108 hours laboratory.

Grade Mode: A, P

DLT 126 TRANSITION TO DENTAL LABORATORY INDUSTRY

2 units

Prerequisite: *DLT 125, or the equivalent knowledge and experiences.*

Corequisites: *DLT 118B, 119B, 124, and 201C or the equivalent knowledge and experiences.*

Capstone course in dental laboratory technology providing a comprehensive review of all concepts and techniques studied throughout the two-year Dental Laboratory Technology Program. Provides students with an opportunity to become proficient in needed critical thinking skills and judgments practiced in commercial dental laboratories such that students may transition from being student technicians to certified technicians. The course is also open to professional dental technicians in the industry either as a refresher or for possible job advancement. Includes development of skills essential for success specific to the dental laboratory career. **Pass/no pass** grading. Total of 36 hours lecture.

Grade Mode: A, P

DLT 201A DIRECTED STUDIES IN BASIC DENTAL LABORATORY TECHNIQUES

1 unit

Prerequisite: *DLT 116C, or the equivalent knowledge and experiences.*

Corequisites: *DLT 116D, 117, 118A, and 119A, or the equivalent knowledge and experiences.*

Development and enhancement of basic dental laboratory techniques, skills and concepts for second year students in the Dental Laboratory Technology Program. Highly focused studies in second year content. **Pass/no pass** grading. Total of 54 hours laboratory.

Grade Mode: A, P

DLT 201B DIRECTED STUDIES IN INTERMEDIATE DENTAL LABORATORY TECHNIQUES

1 unit

Prerequisite: *DLT 201A, or the equivalent knowledge and experiences.*

Corequisite: *DLT 125, or the equivalent knowledge and experiences.*

Development and enhancement intermediate dental laboratory techniques, skills and concepts for second year students in the Dental Laboratory Technology Program. Highly focused studies in second year content. **Pass/no pass** grading. **Short term course.** Total of 54 hours laboratory.

Grade Mode: A, P

DLT 201C DIRECTED STUDIES IN ADVANCED DENTAL LABORATORY TECHNIQUES

1 unit

Prerequisite: *DLT 201B, or the equivalent knowledge and experiences.*

Corequisites: *DLT 118B, 119B, 124, and 126, or the equivalent knowledge and experiences.*

Development and enhancement of advanced dental laboratory techniques, skills and concepts for second year students in the Dental Laboratory Technology Program. Highly focused studies in second year content. **Pass/no pass** grading. Total of 54 hours laboratory.

Grade Mode: A, P

DESIGN TECHNOLOGY

(Business and Engineering Technology Division)

DT 008A INTRODUCTION TO DIGITAL DESIGN AND FABRICATION

3 units

Introduction to digital design and fabrication through the use of computer-aided design (CAD) and technical graphic production. Design centric projects with emphasis on problem solving, critical thinking, collaboration and communication across multiple industries, software and

prototyping technologies with an emphasis sustainable production methods. Integrated workflow processes including online resources, project management, sustainability and globalization. Career skills and portfolio development. **No credit** if taken after EDT 008A. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

DT 008B INTERMEDIATE DIGITAL DESIGN AND FABRICATION

3 units

Prerequisite: DT 008A or ENGR 002 or MIT 101.

Intermediate digital design and fabrication using computer-aided design (CAD) and technical graphic production standards. Design centric projects with emphasis on problem solving, critical thinking, collaboration and communication across multiple industries, software and rapid prototyping technologies. Integrated workflow processes including online resources, project management, sustainability and globalization. Career skills and portfolio development. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

DT 008C ADVANCED SYSTEMS DESIGN AND FABRICATION

4 units

Prerequisite: DT 008B.

Recommended Preparation: DT 110.

Design, develop and manufacture of CAD parametric models and prototypes through design centric projects. Emphasis on problem solving, critical thinking, collaboration and communication in an interdisciplinary environment. Advanced material selection, product development, systems analysis and strength and motion analysis for sustainable production practices. Career skills and portfolio development. Total of 36 hours lecture and 108 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

DT 017 BUILDING CONSTRUCTION TECHNICAL GRAPHICS

3 units

Use of Computer-Aided Drafting (CAD) in the preparation of two and three dimensional Architectural/Engineering/Construction technical graphics and prototypes. Design centric projects with emphasis on problem solving, critical thinking, collaboration and communication across multiple industries, software and prototyping technologies. Integrated workflow processes including online resources, project management, sustainability and globalized communication. Career development includes presentation

skills and portfolio development. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

DT 101 FABRICATION LABORATORY

2 units

Project design and development in a cross disciplinary environment. Fabrication of projects using rapid prototyping equipment of design projects within a design discipline course. Design production using leading edge computer aided design software, prototyping technologies, principles and practices. Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: L, A

DT 105 EMERGING APPLIED TECHNOLOGIES

2 units

Critical examination of current issues in applied technology in relation to the future of work. Research into the implications of current and future technological innovation for industry sectors, occupational clusters. Creation of adaptive strategies for long-term success in a globalized, technology-driven economy including entrepreneurship, lifelong learning, and professional development. Emphasis on sustainability, automation and equity. Total of 36 hours lecture and 18 hours laboratory.

Grade Mode: L, A

DT 110 SUSTAINABLE TECHNOLOGIES

3 units

Introduction to the fundamentals of sustainable design and their technological application for emerging green careers using the LEED (Leadership in Energy and Environmental Design) green rating system framework. Analysis of principles, processes and materials in the built environment, manufacturing and related industries. Emphasis on collaboration, communication through design-centric problem solving. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

DT 114 BUILDING INFORMATION MODELING DESIGN (BIM DESIGN)

3 units

Prerequisite: DT 118.

Introduction to parametric building information modeling (BIM) and its integration in design, construction, management, operation, and maintenance of buildings for sustainable design. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A

DT 118 A/E/C MODELING**3 units****Prerequisite:** DT 017.

Three-dimensional computer-aided surface modeling and prototyping, with a focus on Architectural/Engineering/Construction industry applications. Coursework includes 3-D modeling, animation, material application, light studies and rendering; production of technical graphics and prototypes from 3-D models; referencing multiple technical graphics to create models and prototypes. Design centric projects with emphasis on problem solving, critical thinking, collaboration and communication across multiple industries, softwares and prototyping technologies. Integrated workflow processes including online resources, project management, sustainability and globalized communication. Career development includes presentation skills and portfolio development. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A**DT 150 READING ENGINEERING DRAWINGS****1 unit**

Focus on engineering and manufacturing technical drawings. Emphasizes visualizing and interpreting detailed drawings for mechanical components. Importance placed on generating, modifying, and interpretation of title-blocks, symbols, dimensional and geometric fits and tolerances, view representation, standard fasteners, machine elements, and weldments. Total of 18 hours lecture.

Grade Mode: L, A**DT 220 CAD TECHNICIAN INTERNSHIP****2 units**

Prerequisites: All of the following: DT 140, 150, and 008B and maintain enrollment in 7 units or more including internship.

Supervised, practical experience in an industry related professional environment. **Pass/no pass** grading. Total of 108 hours field practice.

Grade Mode: A, P**DT 230 COMPUTER-AIDED MANUFACTURING****3 units****Prerequisites:** DT 008A and MACH 101.

Production of machining operations on CAM software to produce numerical control programming (G-Code) in order to automate numerically controlled machinery (CNC). Topics include CAD, solid modeling, work piece set-up, toolpath generation, G&M Codes, machine set-up, contour, pocket and surface machining. Total of 27 hours lecture and 81 hours laboratory.

Grade Mode: L, A**DT 240 GEOMETRIC DIMENSIONING AND TOLERANCING****2 units****Prerequisite:** DT 008A or DT 150.

Analysis of functions and mating relationships in determining geometric dimensioning and tolerance. Continuation of the design of mechanical components using three-dimensional attributes of the component beyond two-dimensional dimensions. Application of industry standards such as American Society of Mechanical Engineers (ASME) in solving engineering problems. Topics covered include tolerancing, form controls, datums, orientations controls, tolerance of position, concentric, symmetry, runout and profile controls. Total of 18 hours lecture and 54 hours of laboratory.

Grade Mode: L, A**DESIGN MEDIA ART****(Visual Arts and Media Studies Division)****DMA 002 HISTORY OF DESIGN AND MEDIA ARTS****3 units**

Survey of the history of graphic design and media art. Spans from the printing press to generative art. Includes the influence of technology and digital media on contemporary art and design practices. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit under review.**Grade Mode:** L, A**DMA 004 HISTORY OF DIGITAL GAMES****3 units**

Survey of the history of digital games. Spans from mainframe, text-based games and simulations to consoles, and the indie game development scene. Includes the influence of computer programming and technology on game design today. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit under review.**Grade Mode:** L, A**DMA 010 DIGITAL ART: DESIGN FOUNDATION****3 units**

Introduction to the computer as an effective visual communication design, production and presentation tool. Teaches current design software, hardware, input, and output devices. Design assignments integrate digital tools, techniques, concept development, and composition using text and image. **No credit** if taken after ART 040. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.**Grade Mode:** L, A

DMA 012 DIGITAL ART: PAINTING & DRAWING**3 units**

Introduction to fundamental concepts, practices, and theories of digital art production. Topics include integration of traditional design, and compositional principles with contemporary digital tools. Total of 36 hours lecture and 72 hours laboratory. **No credit** if taken after ART 056.

*Transfer Credit: CSU; UC credit under review. *C-ID: ARTS 250*

Grade Mode: L, A

DMA 020A GRAPHIC DESIGN I**3 units**

Corequisite: ART 031A.

Introduction to the fields of graphic design & advertising. Concept development, the creative design process, production, and presentation techniques through the development of design projects on various media. Design and production skills including beginning computer software skills. Total of 36 hours lecture and 72 hours laboratory. **No credit** if taken after ART 050A.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

DMA 020B GRAPHIC DESIGN II**3 units**

Prerequisite: DMA 020A.

Intermediate studies of the theories and techniques in the fields of graphic design & advertising. Principles of concept and design development are combined with the use of computer design and production tools. Projects are produced for various media like: brochures, magazines, eBooks, posters, corporate ID, branding, advertising, and packaging design. Total of 36 hours lecture and 72 hours laboratory. **No credit** if taken after ART 050B.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

DMA 020C GRAPHIC DESIGN III**3 units**

Prerequisite: DMA 020B.

Advanced studies in the fields of graphic design & advertising and portfolio development. Projects, including a portfolio, are developed for use in seeking employment or application to a university or professional school. Emphasis is on advanced concepts and presentation techniques and the application of visual communication concepts to print and digital media. **No credit** if taken after ART050C. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review

Grade Mode: L, A

DMA 022A TYPOGRAPHY I**3 units**

Introduction to the fundamentals of typographic lettering through the study of historic and contemporary fonts, calligraphic, and hand-drawn typographic forms and systems. Emphasis is on developing conceptual, design, compositional, and hand drawing skills, in order to gain skill in producing logotypes, fonts and custom typographic lettering to for the needs of graphic design and advertising industries. Students will learn a variety of traditional analogue and contemporary digital techniques and materials. **No credit** if taken after ART 051A. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

DMA 022B TYPOGRAPHY II**3 units**

Recommended Preparation: DMA 022A or DMA 020A.

Intermediate studies in the application of typography, and the creation and application of custom logotypes, fonts, and typographic lettering to creative visual communications design projects in the graphic design and advertising industries. Emphasis is on concept development, design, production, and presentation of artwork using both traditional and contemporary digital methods. **No credit** if taken after ART 051B. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

DMA 032 INTERACTION DESIGN**3 units**

Introduction to human-computer interaction, interface design, and interactive and time-based media for designers. Overview of foundational interaction design concepts such as human factors, perception, cognition, research techniques, and design methods for the design of user experiences and interaction. A survey of interactive products, systems, interfaces and technology (software and hardware), constraints and trajectories for future developments and how these frame Interaction Design and production. Workflow, planning and organization of prototyping in Interaction Design. **No credit** if taken after ART 154 or ART 064. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

DMA 034 USER EXPERIENCE DESIGN (UX)**3 units**

Focuses on the quality of experience a person has when interacting with a specific design. A UX Designer focuses on the needs and wants of the user, as well as ease-of-use, and designs for the best possible user experience. Covers the design process, documentation, and tools

*Course Identification Numbering System (C-ID)

used within the UX field. Topics include user research, information architecture, interaction design, prototyping, and usability testing. Following a design process, students will collaborate to research, critique, and design a project that includes prototyping and user-testing. **No credit** if taken after ART 063. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

DMA 050 WEB DESIGN & DEVELOPMENT

3 units

Covers design and creation of websites. Exploration of usability, interface, navigation, and information design as well as creation of dynamic content in websites. Use of HTML, CSS, CMS's, and PHP/MySQL to explore simple to complex interactive projects for the Web. Creation of a professional website designed in an interdisciplinary team environment. Emphasis on project management and conceptual skills that comprise well-designed websites; an interdisciplinary course. **No credit** if taken after ART 198 or ART 098. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

DMA 060 CREATIVE CODING

3 units

Exploration of the creative potential of computer programming using Processing and Java. Teaches the use, and cultural implications of code in the context of art and design. Fundamentals of programming (variables, conditionals, iteration, functions, and objects). Covers generative drawing, image processing, 3D graphics, data parsing, computer vision in a variety of art and design-oriented projects, media outputs and fabrications. For students who would like to explore computer programming in an art and design context. **No credit** if taken after ART 060. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

DMA 062 CREATIVE CODING FOR THE INTERNET

3 units

Exploration of the creative potential of computer programming for the Internet using JavaScript, its use, and cultural implications in the context of art and design. Fundamentals of programming (variables, conditionals, iteration, functions, and objects). Covers generative drawing, 3D graphics, sound, and virtual reality in a variety of design projects specifically for web-based and mobile output. Geared toward students who would like to explore computer programming in an art and design context. **No credit** if taken after ART 158 or ART 059. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

DMA 064 CREATIVE CODING FOR MOBILE DEVICES

3 units

Exploration of the creative potential of computer programming for mobile devices using Apple's Swift programming language. Teaches the use and cultural implications of code in the context of art and design. Fundamentals of programming (variables, conditionals, iteration, functions, and objects). Covers touch-based interfaces, generative drawing, image processing, 3D graphics, data parsing, computer vision in a variety of art and design-oriented projects, media outputs and fabrications. Geared toward students who would like to explore computer programming in an art and design context. **No credit** if taken after ART 061. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

DMA 068 PHYSICAL COMPUTING FOR ART & DESIGN

3 units

Explores the creative potentials in the field of physical computing for artists and designers. Explores innovative ways to create installations, interactive products, designs and sculptures that combine electronics, sensors and motors to generate unique experiences. Students will work individually and in teams to wireframe, prototype and produce interactive objects while learning the basic principles of electronics as they apply to art-making. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

DMA 070 MOTION GRAPHICS

3 units

Exploration of experimental and new technological approaches to creating original 2D and 3D time-based visual imagery for use in design, fine arts, animation, and interactive media. Introduction to the integration of sound, graphics, video, and text. Exploration of motion design and dynamic storytelling to create movies, animation, and professional special effects for digital output. **No credit** if taken after ART 156 or ART 057. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

DMA 072 2D ANIMATION

3 units

Covers the basic theory and mechanics of animation. Development of simple animation using principles such as squash and stretch, overlap and anticipation. Fundamentals of character design, storyboarding, visual storytelling, and layout. Techniques such as stop-motion, onionskin, follow-through and rotoscoping using industry-standard computer animation applications. **No credit** if taken after ART 070. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC under review

Grade Mode: L, A

DMA 080A 3D MODELING & SCULPTING**3 units**

Cover three-dimensional modeling, sculpting, rendering, 3D Printing using industry-standard tools and methods. Topics include modeling with polygons, modeling with NURBs surfaces, materials, textures, lighting, and rendering. Principles of digital sculpting and methods to optimize projects for 2D and 3D printing. **No credit** if taken after ART 155A or ART 085A. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

DMA 080B 3D ANIMATION & SIMULATIONS**3 units**

Introduction to time-based three-dimensional design and dynamic simulations. Animation, motion graphics, and dynamic effects using industry-standard tools and methods. Topics include basic rigging, animation, camera motions, paint effects, procedural animation, and dynamic simulations. Methods for post-production and output to video. **No credit** if taken after ART 155B or ART 085B. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

DMA 090 GAME DESIGN I**3 units**

Surveys history, technology, narrative, ethics, and design of digital games. Work in teams to develop novel game-design story boards, and game design documents. Exploration of the interplay of narrative, graphics, rule systems, and artificial intelligence in the creation of digital games. **No credit** if taken after ART 080. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

DMA 092 GAME DESIGN II: GAME ENGINES**3 units**

Intermediate skills in video game design and development using a 2D and 3D game engine. Creation of projects in 2D, 3D and virtual reality. Utilization of a design sequence that involves brainstorming techniques, teamwork, game design documents, prototyping, and playtesting. Development of project management for an efficient and effective game design workflow. Topics include game rules, balance, complexity, randomness, narrative, player interaction, aesthetics, and world building. Includes basic scripting skills for game development. **No credit** if taken after ART 081. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

DMA 098 DESIGN/MEDIA ARTS INCUBATOR**3 units**

Final course for Design/Media Arts certificates. Identifying, pitching, developing and producing a student-lead, team-based, interdisciplinary digital media project. Exploring strategies for self-production and project promotion. Exposure to mentorship and professional feedback through invited guest critics. Collaborative and professional creative-studio setting. **No credit** if taken after ART 180. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

ECONOMICS**(Social Sciences Division)****ECON 001A PRINCIPLES OF ECONOMICS****3 units**

Prerequisites: *One of the following courses: MATH 125 or MATH 127B or MATH 128B or MATH 250.*

Macro-economics. Introduction to concepts and tools of economic analysis. Theory of demand and supply, national income accounting, economic growth, recessions and inflation. Fiscal and monetary theories and policies. The Federal Reserve system, tools of monetary control and international trade and finance. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ECON 202*

Grade Mode: L, A, P

ECON 001AH HONORS PRINCIPLES OF MACROECONOMICS**3 units**

Prerequisite: *One of the following courses: MATH 125, or MATH 250, or MATH 128B, or MATH 127B.*

Enrollment Limitation: *Acceptance into the Honors program.*

Introductory course in macroeconomic concepts and tools of economic analysis. Theory of demand and supply, national income accounting, economic growth, recessions and inflation. Fiscal and monetary theories and policies. The Federal Reserve system, tools of monetary control and international trade and finance. This enriched course is designed for the Honors Program allowing, for example, more student directed discussions and more extensive writing assignments that include analysis of economic principles. **No credit** if taken after ECON 001A. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ECON 202*

Grade Mode: L, P

ECON 001B PRINCIPLES OF ECONOMICS**3 units**

Prerequisites: *ECON 001A and one of the following: MATH 125 or MATH 127B or MATH 128B or MATH 250.*

*Course Identification Numbering System (C-ID)

Micro-economics. Price analysis, income distribution, comparisons of market structures, resource markets, international trade, income distribution and the role of government. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ECON 201*

Grade Mode: L, A, P

ECON 001BH HONORS PRINCIPLES OF MICROECONOMICS

3 units

Prerequisites: *ECON 001A or 001AH; and one of the following: MATH 125 or MATH 250 or MATH 128B or MATH 127B.*

Enrollment Limitation: *Acceptance into the Honors program.*

Introductory course in microeconomics, price analysis, consumer behavior, comparisons of market structures, resource markets, international trade, income distribution and the role of government. This enriched course is designed for the Honors Program allowing, for example, more student directed discussions and more extensive writing assignments that include analysis of economic principles. **No credit** if taken after ECON 001B. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ECON 201*

Grade Mode: L, P

EDUCATION

(Social Sciences Division)

EDUC 013 INTRODUCTION TO ELEMENTARY CLASSROOM TEACHING

3 units

Introduce students to the concepts and issues related to teaching diverse learners in today's contemporary schools, Kindergarten through grade 12 (K-12). Topics include teaching as a profession and career, historical and philosophical foundations of the American education system, contemporary educational issues, California's content standards and frameworks, and teacher performance standards. In addition to class time, the course requires 54 hours structured field practice in public school elementary classrooms that represent California's diverse student population, and includes cooperation with at least one carefully selected and campus-approved certificated classroom teacher. Total of 36 hours lecture and 54 hours field experience.

Transfer Credit: CSU; UC. C-ID: EDUC 200

Grade Mode: L, P

EDUC 020 INDEPENDENT STUDY

1 unit

Individual projects; research techniques; written reports.

Pass/no pass grading. Total of 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: A, P

EDUC 030 TEACHING AS A PROFESSION

3 units

Provides prospective teachers a beginning foundation for the teaching profession. Exploration of the philosophy, history, sociology of the American educational system and the qualities of effective teaching and learning strategies, and effective learning environment. Instructional strategies for a diverse group of students including socioeconomic status, English learners, learning disabled and physically challenged. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

EDUC 100 TUTORING TECHNIQUES

1 unit

Introduction to various learning styles, tutorial strategies and techniques; selected problems encountered by those rendering tutorial service. **Recommended** tutor eligibility requirements, which include faculty referral and satisfactory score on any required department diagnostic test. Total of 18 hours lecture.

Grade Mode: L, A, P

EDUC 131 INTRODUCTION TO THE SCHOOL-AGE CHILD

3 units

Physical, social, emotional and cognitive development of the school-age child. Emphasis on the interaction between the child and teacher in the child care setting. Total of 54 hours lecture.

Grade Mode: L, A

EDUC 132 CURRICULUM FOR SCHOOL-AGE CHILDREN

3 units

Preprofessional training of teacher aides and teaching assistants for elementary school. Orientation to teaching with special emphasis on extended day programs, activities both before and after school, developmental tasks for different age levels, coordination with classroom activities. Total of 54 hours lecture.

Grade Mode: L, A, P

EDUC 150 EDUCATIONAL THEORY IN INTERACTIVE MULTIMEDIA

3 units

Introduction to educational theory as it applies to the design of interactive multimedia. The emphasis is on the role

**Course Identification Numbering System (C-ID)*

of the learner and his/her approach to learning, the roles of visual and sound elements, educational theory, motor skills, cultural biases, and learner motivation. Portfolio project. An interdisciplinary course. For students enrolled in the Multimedia Certificate Program, but open to all. Total of 54 hours lecture and 18 hours laboratory.

Grade Mode: L, A, P

ELECTRICITY

(Business and Engineering Technology Division)

ELTY 012 BASIC ELECTRICITY—ELECTRONICS

2 units

Fundamental concepts, theories, laws and devices used in the technical industry. Circuit analysis using testing and measuring procedures. Troubleshooting procedures using schematic, measurement instruments and hands-on laboratory experience. **Required** instructional trips. Total of 18 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ELTY 217 ELECTRICAL INSPECTION AND CODES

2 units

Inspection using the national, state and local codes. Duties of the electrical inspector with emphasis on code enforcement, inspection procedures, plan reading, electrical symbols and terminology. Methods of performing electrical inspections and interpreting electrical systems based on the current electrical codes and standards. Emphasis on the importance of safety, asbestos abatement awareness, anchoring and supporting for earthquake mitigation. Quality workmanship, efficient and well-designed electrical systems and retrofitting. **Required** instructional trips. **Recommended** ELTY 240ABCD or 248ABCD. **No credit** if taken after ELTY 217A or B. Total of 36 hours lecture.

Grade Mode: L, A

ELTY 218 ELECTRICAL INSPECTION AND CODES - UPDATE

1 unit

Prerequisite: ELTY 217.

Review of recent changes and revisions to local, state and national electrical codes and standards. Emphasis on new methods of code applications and calculations. Code reference on installation of new electrical hardware and materials. Discussion of future trends of electrical design concepts. Total of 18 hours lecture.

Grade Mode: L, A

ELTY 240A INTRODUCTION TO ELECTRICAL TECHNOLOGY

8 units

Introduction to direct current circuits, theory, practices, applications, DC electrical systems and troubleshooting techniques. Use state-of-the-art equipment, components, devices, power sources for hands-on laboratory experiments. Identify commonly used electrical symbols, abbreviations, circuits, diagrams, wiring methods, and test measuring instruments. Formulas used in electrical theory, offering a review and application of various functions: principles of magnetism and electromagnetic applicable to electrical components, proper use and selection of tools and electrical specifications, codes and standards. **Required** instructional trips. Total of 90 hours lecture and 180 hours laboratory.

Grade Mode: L, A

ELTY 240B ELECTRICAL POWER GENERATION AND CONTROL CIRCUITS

8 units

Prerequisite: ELTY 240A.

Introduction to alternating current circuits, theory, practices and applications for electrical power generation and control circuits. Fundamental theory, calculations, formulas and applications of AC and DC power generation, transmission and distribution systems, transformers, motors and generators. Study complex networks such as RC, RL and RLC circuits, motor controllers, electromagnetic circuits and Poly-Phase systems. Course will include explanation of electrical specifications, codes, standards, terms, abbreviations, components, safety and wiring requirements. Hands-on-laboratory assignments with state-of-the art test and measurement instruments will provide testing techniques and troubleshooting procedures. **Required** instructional trips. Total of 90 hours lecture and 180 hours laboratory.

Grade Mode: L, A

ELTY 240C ELECTRICAL POWER DISTRIBUTION SYSTEMS AND MACHINERY

8 units

Prerequisite: ELTY 240B.

An advanced course that requires knowledge of AC and DC theory, practices and applications. Investigates the theory and applications of motors, generators, electromagnetic, systems and their interaction in power distribution systems and machinery. Covers principles of AC, installation of devices in AC circuits and response to circuits of AC excitation; concepts of electrical symbols, abbreviations, diagrams, specifications, safety procedures, codes and standards. Provides a technical, theoretical, practical and multidisciplinary approach to a broad understanding of electrical formulas, calculations for power technology and alternative energy sources. Hands-on and computer aided

laboratory experiments to develop knowledge and skills in programmable controllers for electrical machinery used in the electrical industry. **Required** instructional trips. Total of 90 hours lecture and 180 hours laboratory.

Grade Mode: L, A

ELTY 240D PROGRAMMABLE CONTROLLERS/SOLID STATE DEVICES AND ELECTRONIC APPLICATIONS

8 units

Prerequisite: *ELTY 240C*.

Advanced course provides theoretical and practical principles concerning DC and AC circuits and systems, electric machinery and automated systems. Design of programmable logic control circuits and systems, ladder logic and diagram, systems wiring, sequencers, numbering systems, timing and counters, logic and math instruction, and program mapping. Machine control functions consisting of; relay type instructions, solid state devices, software development, programming language and diagnostic analyst, using test and measuring instruments. Applications of programmable logic controls include; wire management, management of co-generations systems, alternate energy sources, communication and sensor program management, integrated network systems and uninterrupted power systems. Hands-on laboratory provide applications for installation specifications, system wiring, systems inspection procedures for safety and related codes and standards. **Required** instructional trips. Total of 90 hours lecture and 180 hours laboratory.

Grade Mode: L, A

ELTY 248A INTRODUCTION TO ELECTRICAL TECHNOLOGY

4 units

Fundamental theory and application of DC circuits for the electrical industry. Explanation of electrical terms, codes and components. Measuring electrical parameters with state-of-the-art measurement instruments. Hands-on laboratory assignments with instruments, test techniques, troubleshooting procedures and schematic reading. **Required** instructional trips. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L, A

ELTY 248B ELECTRICAL POWER GENERATION AND CONTROL CIRCUITS

4 units

Prerequisite: *ELTY 248A*.

Fundamental theory and application of AC and DC power generation, distribution and control circuits for the electrical industries. Explanation of electrical codes, standards, terms and components. Hands-on laboratory assignments with state-of-the-art measurement instruments,

test techniques and troubleshooting procedures. **Required** instructional trips. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L, A

ELTY 248C ELECTRICAL POWER DISTRIBUTION SYSTEMS AND MACHINERY

4 units

Prerequisite: *ELTY 248B*.

Theory and application of electromagnetic interaction in power distribution systems and machinery for the electrical industry. Concepts of electrical codes and standards. Laboratory investigations of electrical and magnetic circuits, programmable controllers and state-of-the-art devices. **Required** instructional trips. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L, A

ELTY 248D PROGRAMMABLE CONTROLLERS/SOLID STATE DEVICES AND ELECTRONIC APPLICATION

4 units

Prerequisite: *ELTY 248C*.

Study and performance of programmable controllers for machinery, energy management, cogeneration, alternate energy and uninterrupted power source. Hands-on laboratory assignments with state-of-the-art measurement instruments and troubleshooting concepts. **Required** instructional trips. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L, A

ELTY 250 INTRODUCTION TO PHOTOVOLTAIC SYSTEMS

4 units

Photovoltaic terminology, concepts, vocabulary, techniques and safety. History, applications and benefits of the different PV systems. Basic electrical theories related to photovoltaic. PV system sizing and cost estimating. Voltage, current, resistance and power calculation and measurements. Specification of the components such as inverter, charge controller, combiner, battery and generator. **Required** instructional trips. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L

ELTY 251 PHOTOVOLTAIC THEORY AND INSTALLATION TECHNIQUES

4 units

Prerequisite: *ELTY 250*.

Preparation for entry level employment in photovoltaic (PV) industry. Instruction includes solar electricity fundamentals, PV safety, site analysis, PV system sizing and design, required components and equipment. Product instal-

lation, troubleshooting, net metering laws and National Electrical Code for PV requirements. Successful participants will be qualified to sit for the North American Board of Certified Energy Practitioners (NABCEP) "PV Installer Entry Level Certificate of Knowledge" examination. Instructional trips may be required. **Required** instructional trips. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L

ELECTRONICS

(Business and Engineering Technology Division)

ELTN 015 COMPUTER AIDED ELECTRONIC DRAFTING

3 units

Prerequisites: Enrollment in or completion of ELTN 009 and MATH 003.

Computer aided drafting of electronic (CAED) circuits. Standards, electronic rules check, JEDEC specifications. Computer commands necessary to install and operate the CAED program. Practice in using the CAED programs with emphasis on current limitations and decoupling problems. PC board routing. Multilayer boards. Total of 36 hours lecture and 108 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ELTN 025 LOGIC AND MICROCOMPUTER ELECTRONICS

4 units

Prerequisite: ELTN 032.

Introduction to microcomputer systems, functional elements, organization, instruction sets. Preparation of assembly language programs, elements of structure, stack operations, timing analysis of bus operations. Microprocessor system interfacing, time considerations, interrupts. Multiprocessing and bus-sharing applications. Intel microprocessors with emphasis on 8085 and 8086-type microprocessors. Introduction to embedded controllers, interface design, single-chip controllers. Software development systems and diagnostics. Development and maintenance of microcomputer-based systems. **No credit** if taken after ELTN 125. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ELTN 031 CIRCUIT ANALYSIS

5 units

Prerequisite: ELTN 009.

Recommended preparation: MATH 008.

Field effect and bipolar transistor theory, audio preamplifiers and power amplifiers, coupling and bias stabilization

techniques. Analysis of small-signal models, application of Kirchhoff's laws to multi-mesh active circuits, matrix methods. Mathematical analysis of feedback systems, stability considerations, elementary transforms. Applications of electro-optical devices, operational amplifiers. Complex operator in frequency response measurements. Total of 72 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ELTN 032 DIGITAL AND CONTROL ELECTRONICS

4 units

Prerequisites: ELTN 009 and MATH 008.

Introduction to logic circuit design and microprocessors. Design and analysis of digital, combinatorial logic, and sequential circuits. Minimization techniques using Boolean algebra and Karnaugh maps. Interfacing requirements, truth tables, multiplexers, demultiplexers, A/D converters and DAC's. Computer arithmetic and preparation of assembly language programs. Laboratory experience using digital circuits and microprocessors. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

ELTN 109A APPLIED ALGEBRA FOR ELECTRONICS

4 units

Prerequisite: Enrollment in or completion of ELTN 130 or ELTY 240A.

Application of algebra to the analysis of electronic circuits. Review of measurement accuracy, precision and tolerance, and the use of scientific notation and scientific calculators. Solution of linear algebraic equations, factoring polynomials, rules of exponents, radicals, simultaneous equations and quadratic equations. Direct current network analysis using electronic laws and algebraic principles applied to problems arising in the laboratory. Use of electronic test equipment, measurements, collection of data and preparation of written reports. Recommended high school algebra or MATH 125. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L, A

ELTN 109B APPLIED MATHEMATICS FOR ELECTRONICS

3 units

Prerequisite: ELTN 109A.

Application of trigonometry, number systems and Boolean algebra in electronics. Right angle trigonometry, identities, vector algebra, imaginary operator, impedance, logarithms, solution of exponential equations and use of a scientific calculator. Number systems and theorems of Boolean algebra. Total of 54 hours lecture.

Grade Mode: L, A

ELTN 115 PRINTED CIRCUIT & ELECTRONIC HARDWARE DESIGN

3 units

Prerequisite: *Enrollment in or completion of ELTN 130 or MIT 101.*

Introduction to Electronic Hardware and Printed Circuit Board (PCB) design and manufacturing. Design and fabrication of PCB's with CAD software. Soldering techniques. Group system design. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A

ELTN 117 INTRODUCTION TO MICROCONTROLLERS AND EMBEDDED DESIGN

3 units

Prerequisite: *ELTN 130 or MIT 101.*

Introduction to digital circuits including gates, memory circuits and microcontrollers. Introduction to structured programming concepts and computer numbering systems. Programming microcontrollers and interfacing requirements, A/D and D/A conversion, sensors, user interfaces. Writing and debugging microcontroller programs. Laboratory experiments in the application of embedded microcontrollers and interfacing with digital and analog systems. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A

ELTN 125 LOGIC AND MICROCOMPUTER ELECTRONICS

4 units

Prerequisite: *ELTN 032 or 132.*

Introduction to microcomputer systems, functional elements, organization, instruction sets. Preparation of assembly language programs, elements of structure, stack operations, timing analysis of bus operations. Microprocessor system interfacing, time considerations, interrupts. Multiprocessing and bus-sharing applications. Intel microprocessors with emphasis on 8085 and 8086-type microprocessors. Introduction to embedded controllers, interface design, single-chip controllers. Software development systems and diagnostics. Development and maintenance of microprocessor-based systems. **No credit** if taken after ELTN 025. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L, A

ELTN 130 INTRODUCTION TO ELECTRONICS

3 units

Recommended Preparation: *TECH 107A, MATH 125.*

Introduction to the field of Electronics. Electronics safety. Electronics and the environment. Atomic structure, electric charge, current, voltage, resistance. Battery technologies. Simple DC circuits. Ohm's law and Kirchoff's laws. Reading schematic diagrams. Use of electronics test equipment

for measurement, evaluation and troubleshooting. Simple mathematical formulas, scientific notation, use of scientific calculators. Introduction to AC electricity. Introduction to DC and AC electric motors. Some uses of motors in modern vehicles including hybrid and electric vehicles. Introduction to digital circuits. Introduction to microcontrollers. Total of 36 hours lecture and 54 hours laboratory.
Grade Mode: L

ELTN 131 ANALOG DEVICES AND CIRCUITS

3 units

Prerequisite: *ELTN 130.*

Analog devices including diodes, transistors and operational amplifiers. Field effect and bipolar transistor theory, audio amplifiers. Analysis of RC filters, applications of operational amplifiers. Use of function generators and oscilloscopes to analyze circuits. Analog sensors and applications. Simulation and analysis of electronic circuits using software. **No credit** if taken after ELTN 031 or 121A or 131A. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L

ELTN 132 DIGITAL AND CONTROL ELECTRONICS

4 units

Prerequisites: *ELTN 109B and 113; or ELTN 117.*

Introduction to logic circuit design and microprocessors. Design and analysis of digital, combinatorial logic, and sequential circuits. Minimization techniques using Boolean algebra and Karnaugh maps. Interfacing requirements, truth tables, multiplexers, demultiplexers, A/D converters and DAC's. Computer arithmetic and preparation of assembly language programs. Laboratory experience using digital circuits and microprocessors. **No credit** if taken after ELTN 032. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L, A

EMERGENCY MEDICAL TECHNOLOGY (Health Sciences Division)

EMED 101A EMERGENCY MEDICAL TECHNOLOGY LECTURE AND LABORATORY

6 units

Corequisite: *EMED 101C.*

Recommended Preparation: *MA 115 or COLL 001.*

Enrollment Limitation: *1. CPR training equivalent to the current American Heart Association's Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care at the Healthcare Provider level.
2. Age of 18 or older.*

3. A completed health form evidencing good physical and emotional health.

Selected topics in human anatomy and physiology. Diagnostic signs and interpretations of illness and injuries.

Development of knowledge and skill in procedures of basic emergency rescue and care. Preparation for certification for Emergency Medical Technician (EMT). The scope of practice not to exceed requirements as outlined under California Code of Regulations, Title 22. Total of 90 hours lecture and 72 hours laboratory.

Grade Mode: L, A, P

EMED 101C EMERGENCY MEDICAL TECHNOLOGY AMBULANCE RIDE-ALONGS

½ unit

Corequisites: EMED 101A.

Enrollment Limitations: 1. CPR training equivalent to the current American Heart Association's Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care at the Healthcare Provider level. 2. Age of 18 or older. 3. A completed health form evidencing good physical and emotional health including required immunizations and TB screening before the beginning of Clinicals.

Clinical portion of the Emergency Medical Technician (EMED 101A) course covering selected topics in human anatomy and physiology. Diagnostic signs and interpretations of illness and injuries. Reinforcement of knowledge and skill in procedures of basic emergency rescue and care. Preparation for certification for Emergency Medical Technician (EMT). The scope of practice not to exceed requirements as outlined under California Code of Regulations, Title 22. Three 12-hour shifts will be successfully completed in the field on an EMT ambulance for a total of 36 hours.

Grade Mode: L, A, P

EMED 201 EMERGENCY MEDICAL RESPONDER

3 units

Enrollment Limitations: 1. Minimum age of 16 years. 2. CPR training equivalent to the current American Heart Association's Guidelines for Cardio pulmonary Resuscitation and Emergency Cardiovascular Care at the Healthcare Provider level.

Preparation of first responders for immediate lifesaving care to critical patients. Training of life saving interventions while awaiting additional EMS response and to assist higher level personnel at the scene. A grade of B or better must be achieved to receive a certificate of course completion for EMR. The EMR course meets and exceeds the National EMS Education Standards for EMR training. This is the first level of EMS provider, as recommended by the National Scope of Practice Model for EMS, providing basic life support. Total of 36 hours of lecture and 54 hours of laboratory.

Grade Mode: L, P

ENGINEERING

(Business and Engineering Technology Division)

ENGR 001A SURVEYING

3 units

Prerequisite: MATH 007A.

Introduction to the field of surveying to fulfill engineering transfer credit and provide career exploration to entry level occupation in the field. Topics covered includes both optical and electronic instruments, distance measurements, stadia surveys, leveling and traversing using optical instruments, electronic distance measuring instruments and total stations. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ENGR 002 ENGINEERING GRAPHICS

3 units

Prerequisite: MATH 007A or MATH 009.

Introduction to principles of engineering drawings in visually communicating engineering design and an introduction to computer-aided design (CAD). Engineering design projects with emphasis on the development of visualization skills, orthographic projections, mechanical dimensioning and tolerancing practices, problem solving, critical thinking, collaboration and communication across multiple industries, software and prototyping technologies. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ENGR 010 INTRODUCTION TO ENGINEERING

2 units

Exploration of different branches of engineering, industries and functions of an engineer. Explains the engineering education pathways and explores effective strategies for students to reach their full academic potential. Introduction to the methods and tools of engineering problem solving and design including the interface of the engineer with society and engineering ethics. Students will practice developing communication skills pertinent to the engineering profession. Total of 18 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

ENGR 011 STATICS

3 units

Prerequisite: MATH 005B and PHYS 001A.

Introduction to engineering mechanics. Topics include: properties of forces, moments, couples and resultants; two- and three-dimensional force systems acting on engineering

structures in equilibrium; analysis of trusses, and beams; distributed forces, shear and moment diagrams, center of gravity, centroids, friction, and are and mass moments of inertia. **No credit** if taken after ENGR 015A. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGR 130*

Grade Mode: L, A

ENGR 012 DYNAMICS

3 units

Prerequisite: ENGR 011.

Fundamentals of kinematics and kinetics of particles and rigid bodies. Topics include kinematics of particle motion; Newton's second law, work-energy and momentum methods; kinematics of planar motions of rigid bodies; work-energy and momentum principles for rigid body motion; introduction to mechanical vibrations which is optional for an introductory dynamics course. **No credit** if taken after ENGR 017. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGR 230*

Grade Mode: L, A

ENGR 013 STRENGTH OF MATERIALS

3 units

Prerequisite: ENGR 011.

The study of mechanics of material. Topics include stresses, strains and deformations associated with axial, torsional and flexural loading of bars, shafts and beams, as well as pressure loading of thin-walled pressure vessels. Includes stress and strain transformation, Mohr's Circle, ductile and brittle failure theories, and the buckling of columns. Statically indeterminate systems are also studied. **No credit** if taken after ENGR 015B. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGR 240*

Grade Mode: L, A

ENGR 014 MATERIALS OF CONSTRUCTION

3 units

Prerequisites: CHEM 001A.

Physical properties of engineering materials; their reactions to conditions encountered in various uses; processes by which they are produced and treated. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

ENGR 015A STATICS

3 units

Prerequisites: MATH 005B and PHYS 001A.

Composition and resolution of co-planar and non-planar force systems; equilibrium of rigid bodies; distributed forces; forces in trusses; frames and cables; shear and bending moments in beams; moments of inertia of areas and bod-

ies. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

ENGR 015B APPLIED MECHANICS

3 units

Prerequisite: MATH 005B.

States of stress and strain; analysis and design of structural elements; pressure vessels, beams, torsion bars, springs, columns, riveted and welded connections; inelastic behavior; strength under combined loading; statically indeterminate structures. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

ENGR 016 ENGINEERING CIRCUITS

3 units

Prerequisite: MATH 005B.

Mesh and nodal analysis of electric circuits using Ohm's and Kirchhoff's Laws; Thevenin and Norton Theorems; superposition; transient analysis of RL and RC circuits; steady state analysis of AC circuits; analysis of passive two-port networks; polyphase circuits. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

ENGR 017 DYNAMICS

3 units

Prerequisite: ENGR 015A.

Kinematics of particles; coordinate systems; relative motion; Newton's Second Law; work and kinetic motion; linear and angular impulse and momentum; impact applications; central force motion; conservation of energy and momentum; steady and variable mass flow; rotational motion relative to rotating axis systems; central equation of motion; angular momentum. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

ENGR 018 INTRODUCTION TO NUMERICAL ANALYSIS

3 units

Prerequisite: MATH 005A.

Introduction to numerical analysis, computational methods, computer programming, and problem solving using MATLAB. Provides a working knowledge of the computer as a tool to solve engineering and scientific problems. Understanding of programming and problem-solving allowing use of these tools and techniques to extend MATLAB knowledge. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

*Course Identification Numbering System (C-ID)

ENGLISH

(English Division)

ENGL 001A READING AND COMPOSITION

4 units

Prerequisite: One of the following: (1) ENGL 100; (2) ESL 033B; (3) placement based on the English assessment process.

Recommended Preparation: ENGL 014.

Development of expository and argumentative essays. Instruction in writing annotated papers. Analysis of various forms of writing with emphasis on expository and argumentative essays. **No credit** if taken after ENGL 001AH or 001AS. Total of 72 hours lecture.

Transfer Credit: CSU; UC. *C-ID: ENGL 100 (ENGL 110)

Grade Mode: L, A, P

ENGL 001AH HONORS READING AND COMPOSITION

4 units

Prerequisites: One of the following: (1) ENGL 100; (2) ESL 033B; (3) placement based on the English assessment process.

Recommended Preparation: ENGL 014

Enrollment Limitation: Acceptance into the Honors Program.

Development of expository and argumentative essays. Instruction in writing annotated papers. Analysis of various forms of writing with emphasis on expository and argumentative essays. This enriched course is designed for the Honors Program allowing more student directed discussions and more extensive writing assignments. **No credit** if taken after ENGL 001A or ENGL 001AS. Total of 72 hours lecture.

Transfer Credit: CSU; UC. *C-ID: ENGL 100 (ENGL 110)

Grade Mode: L, A, P

ENGL 001AS STRETCH ACCELERATED READING AND COMPOSITION

4 units

Prerequisites: One of the following: (1) ENGL 001S; (2) ENGL 100; (3) ESL 033B; (4) placement based on the English Assessment process.

Critical analysis of interdisciplinary texts, including literature. Composition of various written texts, including essays. Examination of the uses and significance of language in knowledge creation, community engagement, and academic success in specific disciplines. Emphasis on authentic voice, collaboration, research, student reflection, and composition for the 21st century. Equity-centered classroom and curriculum. **No credit** if taken after ENGL 001A or ENGL 001AH. Total of 72 hours lecture.

Transfer Credit: CSU; UC. *C-ID: ENGL 100 (ENGL 110)

Grade Mode: L, A

ENGL 001B READING AND COMPOSITION

4 units

Prerequisite: One of the following: (1) ENGL 001A or ENGL 001AH or ENGL 001AS; (2) score of 3 on Advanced Placement Test given by the College Entrance Examination Board. Application of critical thinking methods to literary interpretation. Critical analysis, interpretation, and evaluation of literary works including consideration of primary and secondary sources. Students will analyze and evaluate fiction, poetry, and drama through study of literary conventions, inductive and deductive logic, and fallacies. **No credit** if taken after ENGL 001BH. Total of 72 hours lecture. *Transfer Credit:* CSU; UC. *C-ID: ENGL 120 (ENGL-LIT 100)

Grade Mode: L, A, P

ENGL 001BH HONORS READING AND COMPOSITION

4 units

Prerequisite: One of the following: (1) ENGL 001A or ENGL 001AH or ENGL 001AS; (2) score of 3 on Advanced Placement Test given by the College Entrance Examination Board.

Enrollment Limitation: Acceptance into the Honors Program.

Application of critical thinking methods to literary interpretation. Critical analysis, interpretation, and evaluation of literary works including consideration of primary and secondary sources. Students will analyze and evaluate fiction, poetry, and drama through study of literary conventions, inductive and deductive logic, and fallacies. This enriched course is designed for the Honors Program allowing more extensive writing assignments. **No credit** if taken after ENGL 001B. Total of 72 hours lecture.

Transfer Credit: CSU; UC. *C-ID: ENGL 120 (ENGL-LIT 100)

Grade Mode: L, A, P

ENGL 001C INTERMEDIATE COMPOSITION — CRITICAL THINKING AND ARGUMENT

4 units

Prerequisite: ENGL 001A, ENGL 001AH, or ENGL 001AS; (2) score of 3 on Advanced Placement Test given by the College Entrance Examination Board.

Principles of critical thinking applied to writing and reading on complex issues which incorporate logic, inductive and deductive reasoning, the critique of logical fallacies, persuasion, analysis and evaluation of appropriate prose models, including those employing argument, other rhetorical modes, and critical thinking strategies specific to various modes of thought; selective use of citation and documentation. **No credit** if taken after ENGL 001CH. Total of 72 hours lecture.

Transfer credit: CSU; UC. *C-ID: ENGL 105 (ENGL 115)

Grade Mode: L, P

*Course Identification Numbering System (C-ID)

**ENGL 001CH HONORS INTERMEDIATE
COMPOSITION-CRITICAL THINKING
AND ARGUMENT**

4 units

Prerequisite: ENGL 001A, ENGL 001AH, or ENGL 001AS;
(2) score of 3 on Advanced Placement Test given by the
College Entrance Examination Board.

Enrollment Limitation: Acceptance into the Honors Program.

Principles of critical thinking applied to writing and reading on complex issues which incorporate logic, inductive and deductive reasoning, the critique of logical fallacies, persuasion, analysis and evaluation of appropriate prose models, including those employing argument, other rhetorical modes, and critical thinking strategies specific to various modes of thought; selective use of citation and documentation. This enriched course is designed for the Honors Program allowing more student directed discussions and more extensive writing assignments. **No credit** if taken after ENGL 001C. Total of 72 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGL 105 (ENGL 115)*

Grade Mode: L, P

ENGL 001S STRETCH ACCELERATED COMPOSITION I
4 units

Prerequisite: One of the following: (1) ENGL 400 or BUS 112; (2) placement based on the English assessment process.

Corequisite: ENGL 901.

Critical analysis of interdisciplinary texts, including both non-fiction and literature. Composition of various written texts, including essays. Examination of the uses and significance of language in knowledge creation, community engagement, and academic success. Emphasis on authentic voice, collaboration, research, student reflection, and composition for the 21st century. Equity-centered classroom and curriculum. This is the first in a two-class sequence. **No credit** if taken after ENGL 001A, ENGL 001AH, or ENGL 001AS. Total of 72 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

**ENGL 003 TECHNICAL WRITING — ADVANCED
EXPOSITION**

3 units

Prerequisite: ENGL 001A.

Development of writing skills which can be applied to any career or profession. Emphasis on types of writing required to communicate facts and ideas in a technological society. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

ENGL 005A CREATIVE WRITING

3 units

Prerequisite: *Eligibility for ENGL 001B.*

Creative literary expression; short story, poetry and essay. Individual experimentation with various forms; students evaluate their work and work of classmates in light of contemporary writings. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ENGL 005B CREATIVE WRITING

3 units

Prerequisite: ENGL 005A, 006, 007 or 008.

Creative literary expression such as: short story, poetry, dramatic form and essay. The focus is on in-depth criticism of student work and professional writers. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ENGL 006 SHORT STORY WRITING

3 units

Prerequisite: *Eligibility for ENGL 001B.*

Theory and practice in writing the short story. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ENGL 007 INSCAPE MAGAZINE PUBLICATION

3 units

Prerequisite: ENGL 001A, 001AH, or 001AS.

Critical review and selection of creative material; design and layout of a literary magazine. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

ENGL 008 WRITING POETRY

3 units

Prerequisite: *Eligibility for ENGL 001A.*

Writing of poetry in all forms. Reading of traditional and current work. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ENGL 009 CREATIVE NONFICTION

3 units

Prerequisite: ENGL 001A, ENGL 001AH, or ENGL 001AS.

Writing and analysis of creative nonfiction such as memoirs, reviews, profiles, and nature writing. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

*Course Identification Numbering System (C-ID)

ENGL 010 INTRODUCTION TO LINGUISTICS**3 units****Interdisciplinary course:** English, Languages**Recommended preparation:** *Eligibility for ENGL 001A.*

Survey of sounds, structure and development of language in connection with its social and cultural function. Differences and relationships among languages. **No credit** if taken after LING 010. **Recommended** for English and foreign languages majors, but open to all qualified students. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ENGL 011 HISTORY OF ENGLISH LANGUAGE****3 units****Interdisciplinary course:** English, Languages**Recommended preparation:** *Eligibility for ENGL 001A.*

Origins and development of the English language, from its Germanic ancestors to present-day American English. **No credit** if taken after LING 011. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ENGL 012 INTERCULTURAL COMMUNICATION****3 units****Interdisciplinary course:** English, Languages**Recommended preparation:** *Eligibility for ENGL 001A.*

Linguistic and cultural patterns; how and what people communicate. Designed to aid both Americans and foreign students in the development of intercultural understanding and communication skills. **No credit** if taken after LING 012. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: COMM 150***Grade Mode:** L, A, P**ENGL 014 CRITICAL READING****3 units**

Prerequisite: *One of the following: (1) Eligibility for ENGL 001A; (2) ENGL 130; or (3) satisfactory reading placement assessment.*

Development of comprehension and critical thinking skills to increase ability to analyze critically and evaluate different types of writing. Analysis of writing with attention to the accuracy and adequacy of evidence, the logical structure of argument and definitions, persuasive and expressive language and common fallacies. **Cannot be taken concurrently** with ESL 460, 432, ENGL 415 or 130. Total of 54 hours lecture.

*Transfer Credit: CSU***Grade Mode:** L, A, P**ENGL 015 THE RESEARCH PAPER****1 unit****Prerequisite:** *ENGL 001A.*

Application of principles and practices introduced in ENGL 001A to a major research paper in the student's field of study, using system of documentation preferred in the student's field. Total of 18 hours lecture.

*Transfer Credit: CSU***Grade Mode:** L, A, P**ENGL 020 INDEPENDENT STUDY****1 unit**

Prerequisites: *ENGL 001A and permission of department chairperson.*

Individual projects; research techniques; written reports.

Total of 54 hours laboratory.

*Transfer Credit: CSU; UC credit limitations. See counselor.***Grade Mode:** L, A, P**ENGL 024 A LITERATURE IN TRANSLATION****3 units**

Recommended preparation: *Eligibility for ENGL 001A, ENGL 001AS, or ENGL 001AH.*

Reading and discussion of the literature of a specific nationality/culture, emphasizing the unique qualities of that national/cultural identity. Historical, social, cultural and geographic background. Total of 54 hours lecture.

*Transfer credit: CSU; UC***Grade Mode:** L, A, P**ENGL 025A INTERPRETING MODERN LITERATURE****3 units**

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.*

Reading and discussion of poetry, fiction and drama, chiefly modern. Techniques involved in these literary forms. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ENGL 025C WOMEN IN LITERATURE****3 units**

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.*

Examination of the portrayal of women presented in prose, poetry, and drama. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ENGL 025D SCIENCE FICTION AND FANTASY****3 units**

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.*

Genres of science fiction and fantasy, exploring their origins and contemporary expressions. Reading and discussion of representative works. Study of the techniques involved in these works. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P

*Course Identification Numbering System (C-ID)

ENGL 025E LITERATURE OF HORROR (GOTHIC NOVEL)

3 units

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.*
The course includes reading and discussion of recurring motifs and archetypes in the Gothic novel and short stories of horror; analysis of the psychological implications of such types as the doppelganger, the shadow, the anima. The course traces the Gothic mode from its origin in superstition and magic through the contemporary emphasis on the distorted or violated psyche. Total of 54 hours lecture.
Transfer Credit: CSU; UC
Grade Mode: L, A, P

ENGL 025F COMEDY AND LITERATURE

3 units

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.*
Introduction to comedy in literature and/or film. Examination of comic world view as well as comic structures, plots, characters, situations and language. Exploration of the social implications of comedy. Total of 54 hours lecture.
Transfer Credit: CSU; UC
Grade Mode: L, A, P

ENGL 025G MYSTERY AND CRIME FICTION

3 units

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.*
Reading and discussion of selected works from detective fiction, including the following: Poe, Doyle, Hammett, Sayers, Chandler, Christie, MacDonald. Total of 54 hours lecture.
Transfer Credit: CSU; UC
Grade Mode: L, A, P

ENGL 025H AMERICAN JOURNEYS

3 units

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.*
Fictional and non-fictional accounts of recent journeys in search of identity and the sights, people and meaning of America. Total of 54 hours lecture.
Transfer Credit: CSU; UC
Grade Mode: L, A, P

ENGL 025I POST-COLONIAL LITERATURES

3 units

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.*
Introduction to works that explore post-colonial experience and consciousness by authors primarily from the developing world, including Africa, the Middle East, Asia, and Latin America. Total of 54 hours lecture.
Transfer Credit: CSU; UC
Grade Mode: L, A, P

ENGL 025J UTOPIAN AND DYSTOPIAN LITERATURE

3 units

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.*

Reading and discussion of poetry, fiction, drama, and film, chiefly modern. Techniques involved in these literary forms. Total of 54 hours lecture.
Transfer Credit: CSU; UC
Grade Mode: L, A, P

ENGL 026 INTRODUCTION TO LITERARY THEORY AND CRITICISM

3 units

Prerequisite: *ENGL 001B or ENGL 001BH.*
Introduction to theory and practice of literary criticism. Application of major critical theories to selected texts. Total of 54 hours lecture.
Transfer Credit: CSU; UC
Grade Mode: L, A, P

ENGL 030A AMERICAN LITERATURE

3 units

Prerequisite: *Eligibility for ENGL 001B or ENGL 001BH.*
Significant works of American poetry and prose from the colonial period through the Civil War. Total of 54 hours lecture.
*Transfer Credit: CSU; UC; *C-ID: ENGL 130*
Grade Mode: L, A, P

ENGL 030B AMERICAN LITERATURE

3 units

Prerequisite: *Eligibility for ENGL 001B or ENGL 001BH.*
Significant works of American poetry and prose from the Civil War to 1945. Total of 54 hours lecture.
*Transfer Credit: CSU; UC. *C-ID: ENGL 135*
Grade Mode: L, A, P

ENGL 030C AMERICAN LITERATURE

3 units

Prerequisite: *Eligibility for ENGL 001B or ENGL 001BH.*
Significant works of American poetry and prose from 1945 to the present. Total of 54 hours lecture.
*Transfer Credit: CSU; UC. *C-ID: ENGL 135*
Grade Mode: L, A, P

ENGL 034 MAJOR NOVELIST

1 unit

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.*
Intensive study of a single novelist. Total of 18 hours lecture.
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, A, P

ENGL 035 MAJOR DRAMATIST

1 unit

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.*
Intensive study of a single dramatist. Total of 18 hours lecture.
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, A, P

*Course Identification Numbering System (C-ID)

ENGL 036 MAJOR POET**1 unit****Prerequisite:** *Eligibility for ENGL 001A or 001AH or 001AS.*

Intensive study of a single poet. Total of 18 hours lecture.

*Transfer Credit: CSU; UC credit limitations. See counselor.***Grade Mode:** L, A, P**ENGL 037 MAJOR CRITIC****1 unit****Prerequisite:** *Eligibility for ENGL 001A or 001AH or 001AS.*

Intensive study of a single critic. Total of 18 hours lecture.

*Transfer Credit: CSU; UC credit limitations. See counselor.***Grade Mode:** L, A, P**ENGL 044A WORLD LITERATURE: ANTIQUITY TO 1500****3 units****Prerequisite:** *ENGL 001B or ENGL 001BH.*

Reading and discussion of Western and non-Western literature from the Ancient era through 1500 A.D. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGL 140 (ENGL-LIT 180)***Grade Mode:** L, A, P**ENGL 044B WORLD LITERATURE: 1500-1800 A.D.****3 units****Prerequisite:** *ENGL 001B or ENGL 001BH.*

Reading and discussion of Western and non-Western literature written between approximately 1500-1800 A.D. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGL 145 (ENGL-LIT 185)***Grade Mode:** L, A, P**ENGL 044C WORLD LITERATURE: 1800 - MID 20TH CENTURY****3 units****Prerequisite:** *ENGL 001B or ENGL 001BH.*

Reading and discussion of world literature written between 1800 A.D. and the mid 20th century. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGL 145 (ENGL-LIT 185)***Grade Mode:** L, A, P**ENGL 045A LITERATURE OF THE BIBLE****3 units****Prerequisite:** *Eligibility for ENGL 001B or ENGL 001BH.*Reading and discussion of books of the Old and New Testaments selected from among the following: *Genesis, Exodus, Joshua, Ruth, I and II Samuel, I Kings, Job, Proverbs, Isaiah, Amos, Jonah; Matthew, Luke, Acts, Romans, II Corinthians*, other Letters. Religious-social-political ideas, literary

qualities and textual problems. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ENGL 045B LITERATURE OF THE BIBLE****3 units****Prerequisite:** *Eligibility for ENGL 001B or ENGL 001BH.*Reading and discussion of books of the Old and New Testaments selected from among the following: *Genesis, Deuteronomy, Judges, Esther, I and II Chronicles, II Kings, Psalms, Ecclesiastes, Jeremiah, Hosea, Ezekiel, Daniel; Mark, John, Acts, I Corinthians, Hebrews, Revelation*, other Letters. Religious-social-political ideas, literary qualities and textual problems. Total of 54 hours lecture.*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ENGL 046A ENGLISH LITERATURE****3 units****Prerequisite:** *ENGL 001B or ENGL 001BH.*

Surveys of the literature written in the British Isles from Beowulf to Johnson. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ENGL 046B ENGLISH LITERATURE****3 units****Prerequisite:** *ENGL 001B or ENGL 001BH.*

Survey of British literature from the Romantic movement (1798) to the present. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ENGL 047 MEXICAN AND CHICANO LITERATURE****3 units****Prerequisite:** *Eligibility for ENGL 001A or 001AH or 001AS.*

Literary, social and historical aspects of essay, novel, drama, short story and poetry in English translation written by Mexican and Chicano writers with a survey of other relevant Latin American literary works. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ENGL 048 ASIAN LITERATURE****3 units****Prerequisite:** *Eligibility for ENGL 001A.*

Reading and discussion of selected works of historical and/or modern imaginative literature from one or more Asian cultures. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P

*Course Identification Numbering System (C-ID)

ENGL 049A FILM AS DRAMATIC LITERATURE**3 units****Prerequisite:** *Eligibility for ENGL 001A.*

Critical analysis of film types, directors, movements, national cinemas. Close examination of films through lecture, discussion and writing. **No credit** if taken after ENGL 049. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ENGL 049B FILM AS DRAMATIC LITERATURE****3 units****Prerequisite:** *Eligibility for ENGL 001A.*

Critical analysis of film types, directors, movements, national cinemas as they reflect societal issues, historical periods, ethnic and cultural views, and values systems through documentary and dramatic presentation. Close examination of films through lecture, discussion, and writing. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ENGL 050 AFRO-AMERICAN LITERATURE****3 units**

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.* Literary, social and historical aspects of essay, novel, drama, short story, poetry and oral tradition authored by African-Americans. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ENGL 051 NATIVE AMERICAN MYTHOLOGY AND LITERATURE****3 units****Prerequisite:** *Eligibility for ENGL 001A.*

Reading and discussion of selected works from mythology and literature of Native Americans; some discussion of history and art, but major emphasis on mythology, fiction, poetry and autobiography. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ENGL 052 ASIAN AMERICAN LITERATURE****3 units**

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.* Literary, social and historical aspects of essay, novel, drama, short story and poetry written by Asian American authors. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ENGL 053 INTERPRETING POETRY****3 units****Prerequisite:** *Eligibility for ENGL 001B or ENGL 001BH.*

Reading and discussion of traditional, modern and contemporary poems. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ENGL 054 CALIFORNIA LITERATURE****3 units****Prerequisite:** *Eligibility for ENGL 001A.*

Literary and historical perspectives of fiction, biography, journals, and letters about California by California writers. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ENGL 057 MODERN DRAMA****3 units****Prerequisite:** *Eligibility for ENGL 001B or ENGL 001BH.*

Reading and discussion of continental, British and American drama from Ibsen to the present. Representative plays by Strindberg, Chekhov, Pirandello, O'Neill, Shaw, Brecht, Beckett, Genet, Pinter, Albee. Major theatrical movements: naturalism, symbolism, expressionism. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ENGL 058 QUEER STUDIES IN LITERATURE****3 units****Prerequisite:** *Eligibility for ENGL 001B or ENGL 001BH.*

Examines representations of normative and non-normative sexuality in literature. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A**ENGL 059 CHILDREN'S LITERATURE****3 units**

Prerequisite: *Eligibility for ENGL 001A or 001AH or 001AS.*

Reading and analysis of selected stories for young children and of selected critical evaluations of children's literature. **For** Child Development students, library tech students, writers of children's literature and parents, but open to all students. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: ENGL 180 (ENGL-LIT 145)***Grade Mode:** L, A, P**ENGL 060 MASTERPIECES OF DRAMA****3 units****Prerequisite:** *Eligibility for ENGL 001A.*

Representative dramatic literature from the ancient Greeks to contemporary theater. Form, content, philosophical and

*Course Identification Numbering System (C-ID)

historical perspectives and criticism. Discussion, written analysis and instructional trips. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ENGL 061 INTRODUCTION TO THE NOVEL

3 units

Prerequisite: ENGL 001A.

Reading and analysis of selected classic and contemporary novels. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ENGL 078A INTRODUCTION TO SHAKESPEARE

3 units

Prerequisite: Eligibility for ENGL 001B or ENGL 001BH.

Reading and discussion of 12 to 16 tragedies, comedies and histories, including the following: *Love's Labor's Lost*; *Twelfth Night*; *Richard II*; *Henry IV, parts I and II*; *Henry V*; *Hamlet*; *Othello*. Selections from the Sonnets. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ENGL 078B INTRODUCTION TO SHAKESPEARE

3 units

Prerequisite: Eligibility for ENGL 001B or ENGL 001BH.

Reading and discussion of 12 to 16 tragedies, comedies and histories, including the following: *The Merchant of Venice*; *As You Like It*; *Henry VI, parts I, II, III*; *Richard III*; *King Lear*; *Macbeth*. Selections from the Sonnets. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ENGL 082A INTRODUCTION TO MYTHOLOGY

3 units

Prerequisite: Eligibility for ENGL 001B or ENGL 001BH.

Fertile Crescent (Egyptian, Hebrew, Mesopotamian), Classical (Greek and Roman), and Old European mythologies. Emphasis on literary texts and creative expressions, such as art, music, and artifacts. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ENGL 082B INTRODUCTION TO MYTHOLOGY

3 units

Prerequisite: Eligibility for ENGL 001B or ENGL 001BH.

Historical and thematic exploration of mythology of one major cultural or geographical area other than Fertile Crescent. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ENGL 082C INTRODUCTION TO MYTHOLOGY

3 units

Prerequisite: Eligibility for ENGL 001B or ENGL 001BH.

Intensive study of a single body of traditional narrative, such as the Arthurian cycle; double, motifs; quest motifs; folk tales; fairy tales. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ENGL 100 READING AND WRITING SKILLS

4 units

Prerequisite: One of the following: (1) ENGL 400 or BUS 112; (2) placement based on the English assessment process.

Corequisite: ENGL 901.

Writing expository, analytical, and argumentative essays; developing critical reading research skills. Review of sentence structure and grammar. Total of 72 hours lecture.

Grade Mode: L, A

ENGL 110 SKILLS FOR COLLEGE SUCCESS

2 units

Development of essential study techniques and critical thinking skills related to time management, textbook mastery, test taking, and memory. Total of 36 hours lecture.

Grade Mode: L, A, P

ENGL 130 ADVANCED READING FOR ACADEMIC SUCCESS

3 units

Prerequisite: One of the following: (1) ENGL 415; (2) eligibility for ENGL 100 or ESL 033B; or (3) satisfactory reading placement assessment.

Development of reading skills, vocabulary and study techniques. **Recommended** enrollment in ESL 033B or ENGL 100. **No credit** if taken after ENGL 014. **Cannot be taken concurrently** with ESL 460, 432, ENGL 415 or 014. Total of 54 hours lecture and 18 hours laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Grade Mode: L, A, P

ENGL 135 FROM PAGE TO PERFORMANCE

1 unit

Reading and viewing of plays performed in off-campus locations. Approaching the printed text; approaching the stage performance; relationship of text to performance. **Pass/no pass** grading. Total of 18 hours lecture.

Grade Mode: A, P

ENGL 400 ENGLISH ESSENTIALS

4 units

Corequisite: ENGL 902.

Basic essay writing skills; reading for understanding;

grammar and mechanics. **Required** concurrent enrollment in ENGL 902. **Recommended** enrollment in ENGL 415 or 130. **No credit** if taken after ENGL 100 or 001A. **For** native speakers of English whose English placement assessment does not qualify them for ENGL 100 or 001A. **Not recommended** for ESL students. Total of 72 hours lecture.

Grade Mode: L, A, P

ENGL 403 READING AND WRITING

1 unit

Improvement of reading, writing, vocabulary and spelling. Individualized assessment. **Pass/no pass** grading. Total of 54 hours laboratory.

Grade Mode: A, P

ENGL 410 BASIC GRAMMAR

1 unit

Parts of speech; sentence structure; subject-verb agreement; pronoun case and agreement. **Recommended** for students in ENGL 001A and 100 who have difficulty with grammar. **No credit** if taken after ENGL 001A. Total of 18 hours lecture.

Grade Mode: L, A, P

ENGL 411 PUNCTUATION

1 unit

Standard punctuation; troublesome problems and common errors in English usage. **Recommended** enrollment in or completion of ENGL 410. **No credit** if taken after ENGL 001A. **For** students who have difficulty with punctuation. Total of 18 hours lecture.

Grade Mode: L, A, P

ENGL 412 SPELLING

1 unit

Systematic approach to mastery of American English spelling through applied learning techniques. **No credit** if taken after ENGL 001A. Total of 18 hours lecture.

Grade Mode: L, A, P

ENGL 413 VOCABULARY BUILDING

1 unit

High-frequency words essential for success in college; analysis of root words, prefixes and suffixes to assist in vocabulary development. **No credit** if taken after ENGL 001A. Total of 18 hours lecture.

Grade Mode: L, A, P

ENGL 415 READING FOR ACADEMIC SUCCESS

3 unit

Introduction to word attack skills, vocabulary, study skills, and basic reading techniques. **Recommended** enrollment in ESL 033A or ENGL 400. **No credit** if taken after ENGL 130 or 014. **Cannot be taken concurrently** with ESL 460, 432,

ENGL 130 or 014. Total of 54 hours lecture and 18 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Grade Mode: L, A, P

ENGL 434 TECHNICAL/VOCATIONAL READING

3 units

Development of basic reading and vocabulary skills for students enrolled in occupational curricula. Individualized instruction. Total of 54 hours lecture and 18 hours laboratory.

Grade Mode: L, A, P

ENGL 435 VOCATIONAL ENGLISH AND INFORMATION TECHNOLOGY (BASIC)

2 units

Job-related writing and basic research skills appropriate to the workplace. Technical vocabulary used in the student's vocational area. Library and web-based research, critical thinking and problem-solving specifically focused on workplace needs. **Recommended** concurrent enrollment in a vocational course. Total of 36 hours lecture.

Grade Mode: L, A, P

ENGL 450 INTRODUCTION TO ENGLISH ESSENTIALS

3 units

Introduction to basic writing skills with emphasis on simple sentence structure, English usage, mechanics and spelling. Integrated with basic study techniques, time management, textbook introduction, test taking, problem solving and memorization. **Pass/no pass** grading. **Not recommended** for ESL students. Total of 72 hours lecture.

Grade Mode: A, P

ENGL 901 WRITING CENTER LAB

.30 units

Corequisite: *ENGL 100 or 001S.*

Development of writing skills for students in English 100 through the use of the Writing Center. Individualized instruction with Writing Center tutors and computer software. **Pass/no pass** grading. Total of 18 hours laboratory.

Grade Mode: A, P

ENGL 902 WRITING CENTER LAB

.30 units

Corequisite: *ENGL 400.*

Development of writing skills for students in English 400 through the use of the Writing Center. Individualized instruction with Writing Center tutors and computer software. **Pass/no pass** grading. Total of 18 hours laboratory.

Grade Mode: A, P

ENGLISH AS A SECOND LANGUAGE

(Languages Division)

The English as a Second Language curriculum has been developed sequentially for students to achieve the reading and writing skills necessary for academic success. Placement within the sequence depends upon multiple measures.

The recommended sequence is:

ESL 420
ESL 422
ESL 122
ESL 033A
ESL 033B

No credit will be given for the higher level English as a Second Language course if a student is concurrently enrolled in two different levels of this sequence. **No credit** will be given for a lower level course in this sequence if a student has successfully completed a higher level course or an English composition course (English 100, 001A, 001B, 001C).

ESL 033A ESL READING AND WRITING — LEVEL 4 4 units

Prerequisite: *ESL 122, or satisfactory ESL placement assessment.*

Reading and composition to prepare students for college classes. Practice in advanced sentence structure; methods of paragraph and essay development; reading of college-level material. **Recommended** enrollment in ENGL 415. **No credit** if taken after ESL 033B, ENGL 001A, 001B, 001C or 100. **Cannot be taken concurrently** with ESL 033B, 122, 422, 420, ENGL 001A, 001B, 001C, 100, 400. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ESL 033B READING AND WRITING — LEVEL 5 4 units

Prerequisite: *ESL 033A or satisfactory ESL placement assessment.*

Readings in college-level texts including fiction and non-fiction; methods of essay and annotated paper development. Designed to prepare students for success in English composition classes. **Recommended** enrollment in ENGL 130. **No credit** if taken after ENGL 001A, 001B, 001C, 100. **Cannot be taken concurrently** with ESL 033A, 122, 422, 420, ENGL 001A, 001B, 001C, 100, 400. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ESL 040 LITERATURE IN A SECOND LANGUAGE

1 unit

Prerequisite: *Enrollment in or completion of ESL 033A.*

Introduction to the diversity of fiction, poetry and drama in English and other languages. Designed for cultural expression and the development of reading skills in English. Total of 18 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

ESL 106 SPEAKING AND LISTENING FOR ACADEMIC SUCCESS

4 units

Recommended Preparation: *ESL 136 or 146, and eligibility for ESL 033B or ENGL 100.*

Development of advanced speaking and listening skills for achieving academic goals. Task activities include group discussion, individual presentations, evaluation of lectures and media broadcasts. Attention will be given to building college-level skills. Total of 72 hours lecture.

Grade Mode: L, A, P

ESL 111 ACADEMIC READING FOR ESL

3 units

Prerequisite: *One of the following: (1) Eligibility for ESL 033A; or (2) satisfactory reading placement assessment.*

Essential college reading skills and strategies with an emphasis on comprehension, academic vocabulary, and reading fluency. Focus on literal and interpretive levels of narrative and expository texts. Attention to the relationship between cultural references and textual meaning. Total of 54 hours lecture.

Grade Mode: L, A, P

ESL 113 ADVANCED ESL VOCABULARY

2 units

Prerequisites: *Eligibility for ESL 033A or ENGL 100.*

Recommended for advanced ESL students needing to increase their academic vocabulary words and phrases in order to comprehend and use advanced academic English, increasing their confidence in comprehending and using high-level vocabulary for academic and non-academic situations. Focus on advanced prefixes, roots, suffixes; two- and three-word verbs, collocations/idioms, word families, and dictionary use. Total of 36 hours of lecture.

Grade Mode: L, A, P

ESL 122 GRAMMAR AND WRITING — LEVEL 3

4 units

Prerequisite: *ESL 422, 490B, SPSV 490B or placement based on the ESL assessment process.*

Development of grammar and writing skills for academic purposes. Reading of low-intermediate fiction and non-fiction; written practice in sentence patterns and compositions. **Recommended** enrollment in ESL 432. **No credit** if

taken after ESL 033A, 033B, ENGL 001A, 001B, 001C, 100. **Cannot enroll concurrently** in ESL 033A, 033B, 420, 422, ENGL 001A, 001B, 001C, 100 or 400. Total of 90 hours lecture.

Grade Mode: L, A, P

ESL 132 READING – LEVEL 3

3 units

Prerequisite: *ESL 432 or placement based on the ESL reading assessment process.*

Development of word attack skills, vocabulary, study skills, and intermediate reading techniques. **Recommended** enrollment in ESL 122. **No credit** if taken after ENGL 415, 130, 114. Cannot be taken concurrently with ESL 460, ESL 432, ENGL 415, 130, 014. Total of 54 hours lecture and 18 hours laboratory.

Grade Mode: L, A, P

ESL 133 ADVANCED SENTENCE STRUCTURE REVIEW

2 units

Recommended Preparation: *Eligibility for ESL 033B, ENGL 100, or ENGL 001A.*

Review of advanced grammar structures, including adverb, adjective, and noun clauses, and conditional forms. **For** ESL students who need to review advanced grammar. Total of 36 hours lecture.

Grade Mode: L, A, P

ESL 136 AMERICAN CULTURE THROUGH SPEAKING AND LISTENING

3 units

Recommended preparation: *ESL 446 or 442, and enrollment in ESL 033A or ENGL 415.*

Development of high intermediate to advanced speaking and listening skills through the discussion of current events and American cultural and social issues as well as the study of regionalisms. Movies, songs, TV and radio programs will be used to enhance cultural competency and to build fluency in aural comprehension and spoken communications skills. Activities include oral reports, group and panel discussions, in-class and out-of-class interviews. Some library research and reading assignments. Total of 54 hours lecture.

Grade Mode: L, A, P

ESL 146 PRONUNCIATION OF AMERICAN ENGLISH - LEVEL 2

3 units

Recommended preparation: *Completion of ESL 246 (Level 1) or equivalent, current enrollment in ESL 152 for eligibility for ESL 033A.*

Further development of pronunciation skills through practice of American consonant blends and advanced stress and intonation patterns. Use of phonetic alphabet reduced

forms and advanced features of vowel and consonant sounds. Total of 54 hours lecture.

Grade Mode: L, A, P

ESL 171A EXPLORING TOPICS IN ESL

3 units

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 54 hours lecture.

Grade Mode: L, A, P

ESL 171B EXPLORING TOPICS IN ESL

2 units

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 36 hours lecture.

Grade Mode: L, A, P

ESL 171C EXPLORING TOPICS IN ESL

1 unit

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 18 hours lecture.

Grade Mode: L, A, P

ESL 172 ESL FOR THE WORKPLACE

3 units

Prerequisite: *Required eligibility for ESL 122 or above.*

English communication skills appropriate to a workplace setting, including workplace terminology, safety issues, reports and memos, job search skills, communicating with coworkers, and an understanding of workplace ethics. Total of 54 hours lecture.

Grade Mode: L, A, P

ESL 176 EFFECTIVE SPEAKING AND LISTENING II

3 units

Continuing development of conversation skills in a variety of social situations. Practice and use of intermediate language skills. Listening activities to help students understand natural speech. Vocabulary, idiomatic expressions, and grammatical patterns common to spoken English. **Recommended** for students who have completed ESL 446 and/or are enrolled in ESL 122 and/or ESL 132. Total of 54 hours lecture.

Grade Mode: L, A, P

ESL 246 PRONUNCIATION OF AMERICAN ENGLISH - LEVEL 1

3 units

Recommended preparation: *ESL 442 or 446; or enrollment in ESL 446, or eligibility for ESL 422.*

Introduction to American speech sounds, basic stress and intonation patterns. Study of selected suffix endings, speech mechanism and phonetic alphabet. Total of 54 hours lecture.

Grade Mode: L, A, P

ESL 403 ESL SKILLS WORKSHOP

1 unit

Individualized instruction in writing, vocabulary, and spelling to assist non-native speakers of English concurrently enrolled in a core ESL course. Total of 18 hours lecture.

Grade Mode: L, A, P

ESL 410A SENTENCE STRUCTURE REVIEW

1 unit

Review parts of speech and common sentence structures. **Recommended** for students (in ESL 422 or ESL 122) who need review of common sentences. Total of 18 hours lecture.

Grade Mode: L, A, P

ESL 410B VERB REVIEW

1 unit

Review parts of speech and common sentence structures. **Recommended** for students (in ESL 422 or ESL 122) who need review of common sentences. Total of 18 hours lecture.

Grade Mode: L, A, P

ESL 413 ESL VOCABULARY DEVELOPMENT

1 unit

Word families, idioms, prefixes and suffixes, dictionary use. **Recommended** for ESL students who need basic vocabulary development. Total of 18 hours lecture.

Grade Mode: L, A, P

ESL 420 GRAMMAR AND WRITING — LEVEL 1

4 units

Intensive practice in basic English sentence structure for students who wish to prepare for college-level work. Introduction to spelling, punctuation, vocabulary development and English writing conventions. **Recommended** enrollment in ESL 460 and 456. **No credit** if taken after ESL 033A, 033B, 122, 422, ENGL 001A, 001B, 001C, 100 or 400. **Cannot enroll concurrently** in ESL 033A, 033B, 122, 422, ENGL 001A, 001B, 001C, 100 or 400. Total of 90 hours lecture and 18 hours laboratory.

Grade Mode: L, A, P

ESL 422 GRAMMAR AND WRITING — LEVEL 2

4 units

Prerequisite: *ESL 420 or satisfactory ESL placement assessment.*

Development of reading and writing skills for academic purposes. Readings in short essays and fiction; written

practice in sentence patterns, paragraphs, and short essays. **Recommended** enrollment in ESL 432. **No credit** if taken after ESL 033A, 033B, 122, ENGL 001A, 001B, 001C, or 100. **Cannot enroll concurrently** in ESL 033A, 033B, 122, 420, ENGL 001A, 001B, 001C, 100, or 400. Total of 90 hours lecture.

Grade Mode: L, A, P

ESL 432 ESL READING - LEVEL 2

3 units

Prerequisite: *ESL 460 or satisfactory reading placement assessment.*

Development of vocabulary and reading strategies used in academic and personal contexts. **Recommended** enrollment in ESL 422 and 446. **No credit** if taken after ESL 132, 111, ENGL 415, 130, or 014. **Cannot be taken concurrently** with ESL 460, 132, 111 ENGL 415, 130 or 014. Total of 54 hours lecture and 18 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Grade Mode: L, A, P

ESL 446 EFFECTIVE SPEAKING AND LISTENING

3 units

Recommended preparation: *ESL 456, 420 or 460; and enrollment in ESL 432, 422, 246 or 122.*

Practice of casual and formal dialogues in commonplace situations. Everyday language functions and conversation management skills. Listening activities to enhance comprehension of daily topics. Idiomatic expressions and grammatical patterns common to spoken English. Total of 54 hours lecture.

Grade Mode: L, A, P

ESL 456 BASIC SPEAKING AND LISTENING

6 units

An introductory course in spoken English to develop basic communication skills for everyday life in the U.S. Listening and conversation practice around daily topics, extensive vocabulary building and practice of basic grammatical structures. **Recommended:** Concurrent enrollment in ESL 420 and ESL 460. **Pass/no pass** grading. Total of 108 hours lecture.

Grade Mode: L, A, P

ESL 459 TECHNOLOGY FOR ESL STUDENT SUCCESS

1 unit

Development of technical skills for professional and academic communication through the use of technology, such as multimedia and online learning tools. Total of 18 hours lecture.

Grade Mode: L, P

ESL 460 ESL READING - LEVEL 1

3 units

Introduction to vocabulary building, word attack skills, and basic reading techniques. **Recommended** enrollment in ESL 420 and 421. **No credit** if taken after ESL 432, ENGL 415, 130 or 014. **Cannot be taken concurrently** with ESL 432, ENGL 415, 130 or 014. Total of 54 hours lecture and 18 hours laboratory. Lab may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Grade Mode: L, A, P

ESL 472 ESL IN THE WORKPLACE

3 units

English communication skills appropriate to a workplace setting, including workplace terminology, instructions and procedures, safety issues, telephone and email skills, and an understanding of workplace ethics. **No credit** if taken after ESL 172. Total of 54 hours lecture.

Grade Mode: L, A, P

ENVIRONMENTAL STUDIES

(Natural Sciences Division)

ENVS 001 INTRODUCTION TO ENVIRONMENTAL SCIENCE

4 units

Relationship of living organisms to the environment, including human impact on the atmosphere, hydrosphere, lithosphere and biosphere. Emphasis is placed on understanding of biological and physical science issues currently faced by society. Includes laboratory and field investigation of ecosystems and the environment. **No credit** if taken after BIOL 037, BIOL 040 or PHSC 037. Total of 54 hours lecture and 54 hours laboratory.

Transfer credit: CSU; UC

Grade Mode: L, A, P

ENVS 002 HUMAN IMPACT ON THE ENVIRONMENT

3 units

Interaction of human populations with local and global environments. Interrelationships of ecosystem and biosphere components. **No credit** if taken after BIOL 036 or GEOG 010. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ENVS 003 CHEMISTRY AND THE ENVIRONMENT

4 units

Prerequisite: One of the following: MATH 125, 127B, 128B, or 150.

Introduction to basic chemistry and environmental science for the non-science major with an emphasis on how

chemical principles relate to everyday life. Topics include: indigenous practices, natural resources, water usage, pollution, healthy food, chemical additives to food, common organic chemicals, pesticides, drugs, household products, redox, soap-making, nuclear issues and composting. **Required** field trips. **No credit** if taken after CHEM 010. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ENVS 010 ENVIRONMENTAL HORTICULTURE

3 units

Introduction to environmental horticulture surveying the structure and function of horticultural practices in the laboratory, agricultural and natural landscapes. Examination of plant structures, growth processes, physiology, propagation, growth media, biological competitors, environmental variables, and post-harvest factors of food, fiber, and ornamental plants. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, P

ENVS 011 SOIL SCIENCE

3 units

Physical, chemical and biological properties of soil. Focus on soil classification, derivation, use function and management including erosion, moisture retention, structure, cultivation, organic matter and microbiology. Laboratory topics include soil type, classification, soil reaction, soil fertility and physical properties of soil. Total of 36 hours lecture and 54 hours of laboratory.

Transfer Credit: CSU

Grade Mode: L, P

ENVS 012 PLANT MATERIALS AND USAGE I

3 units

Identification, growth habits, culture and ornamental use of landscape and indoor plants adapted to climates of California. Plants emphasized will come from the current California Association of Nurseries and Garden Centers (CANGC) and Professional Landcare Network (PLANET) Certification Tests Plant Lists. Covers those plants best observed and studied in the spring of the year. Plant materials from local regions will also be included, with special emphasis on drought tolerant plants. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, P

ENVS 020 INDEPENDENT STUDY

1 unit

Recommended Preparation: Enrollment in or completion of any college-level (1-99) course in the Natural Sciences.

Enrollment Limitation: Permission of the Dean.

Independent, faculty-guided student inquiry, project, research, laboratory experiment and/or field investigation. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, P

ENVS 030 ENVIRONMENTAL FIELD INVESTIGATIONS

2 units

Prerequisite: Enrollment in or completion of ENVS 001 or ENVS 002.

Field investigation of the environment in an area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ENVS 040 ENVIRONMENTAL FIELD LABORATORY

1 unit

Prerequisite: Enrollment in or completion of ENVS 001, 002, or 003.

Observation and interpretation of environmental phenomena in the field. **Required** instructional trips. **Recommended** enrollment in or completion of any Environmental Studies lecture or lecture/lab course. Total of 18 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

FASHION

(Visual Arts and Media Studies Division)

FASH 001A FASHION SURVEY

3 units

Introduction to clothing construction. Orientation to fashion careers, aptitude to fashion, life skills, time management, and education planning. Industrial sewing equipment, tools, and materials will be used to produce samples of elementary level garment construction as foundation to the understanding of pattern construction, fashion design, manufacturing and production. Industry research will include orientation to online research. Preparation of a tech pack. **Recommended** FASH 002. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

FASH 001B INTERMEDIATE CLOTHING CONSTRUCTION

3 units

Prerequisites: FASH 001A and FASH 005.

Apparel construction using industrial sewing techniques. Samples and garments demonstrating intermediate apparel construction skills for womenswear, sportswear, and knits. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

FASH 001C ADVANCED CLOTHING CONSTRUCTION

3 units

Prerequisites: FASH 001B and FASH 108.

Advanced construction methods and techniques. Evaluation and implementation of solutions to advanced clothing construction problems in tailoring, couture and alterations. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

FASH 002 INTRODUCTION TO FASHION INDUSTRY

3 units

Factors and concepts that affect fashion development, design, apparel production, marketing, distribution, retail merchandising, promotion and the consumer. Understanding nomenclature and forms of communication specific to the fashion industry. Survey of career opportunities in the apparel industry. **No credit** if taken after FASH 101. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

FASH 005 PATTERN DRAFTING

3 units

Prerequisites: FASH 001A and FASH 002.

Drafting basic patterns. Flat pattern manipulation for a variety of designs. Construction of basic sloper and selected samples. Introduction to the application of computer patternmaking. **Recommended** FASH 021 and FASH 110. **No credit** if taken after FASH 107A. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

FASH 009 BEGINNING TEXTILES

3 units

Textile identification, methods, production, historical background, investigation of new fibers, fabric constructions and finishes. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

FASH 021 PRINCIPLES OF FASHION

3 units

Analysis of apparel, color selection, design principles and concepts. The study of trend development, fashion influences, image and design applications for the target cus-

tomers. The interrelationships among social, psychological, cultural, economic, aesthetic and physical factors in apparel will also be part of this study. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

FASH 105 INTERMEDIATE FASHION DRAFTING AND DRAPING

3 units

Prerequisites: All of the following: FASH 001B, 005, 108, 111A.

Intermediate patternmaking by drafting, flat pattern manipulation, and draping on dress forms. Development of pant and tailoring slopers. Construction of pants and tailored samples of intermediate difficulty. Computer concepts relating to the development of sleeve slopers and tech packs. **No credit** if taken after FASH 107B. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

FASH 106 ADVANCED PATTERN DRAFTING AND DRAPING

3 units

Prerequisites: All of the following: FASH 001B, FASH 005, FASH 108, FASH 111A

Patternmaking by flat pattern manipulation and draping on dress forms. Development of production patterns. Construction of samples with an emphasis on knitwear. Computer applications in grading the pattern size. **No credit** if taken after FASH 107C. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

FASH 108 PATTERNMAKING BY DRAPING

3 units

Prerequisite: FASH 001A and either FASH 005 or FASH 107A.

Designs created by draping on dress forms. Patternmaking from completed drapes. Construction of basic slopers and samples. Preparation of tech packs and design room documents. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

FASH 109 COMPUTER AIDED FASHION DESIGN

3 units

Prerequisite: FASH 005.

Beginning study of computer applications in patternmaking grading, pattern development, flat pattern manipulation and the sizing of patterns. Pre-production technologies and production documents will be prepared utilizing computer applications current to the industry. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

FASH 110 FASHION ILLUSTRATION

3 units

Prerequisite: Enrollment in or completion of FASH 002.

Recommended preparation: FASH 001A, FASH 021.

Digital and manual drawing techniques for the fashion industry. Emphasis on the rendering of apparel, texture and color of fabric. Digital color media will be explored to recreate accurate textile representations. Production flat drafting and accurate garment sketches showing exact proportions and measurements. Presentation materials and portfolio techniques will be explored. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

FASH 111A INTRODUCTION TO FASHION DESIGN

3 units

Prerequisites: All of the following: FASH 001A, 002, 021, FASH 110.

Fashion design concepts involving research. Trend prediction, fashion influences, target customer buying trends and trade publications will be utilized in the production of fashion designs that focus on a specific category, season, price range and target customer. Influences such as historical costume, ethnic clothing and textiles, military uniforms and fine art will be researched and the results applied to create original fashion designs. Artwork will take several forms suitable for inclusion in final portfolio: full color renderings, presentation boards, line pages, and sales portfolios. Emphasis will be on women's and junior's apparel, with some discussion on men's, children's and boy's apparel. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

FASH 111B INTERMEDIATE FASHION DESIGN

3 units

Prerequisites: FASH 111A and FASH 005.

Study of design applications related to category, target customer, and commercial producers of fashion apparel. Creation of apparel lines, using CAD technology to create tech packs, line pages and full-color illustrations. Additional work may include sample garments and patterns. All projects are suitable for inclusion in final portfolio, both digital and hard copy. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

FASH 111C ADVANCED FASHION DESIGN

3 units

Prerequisite: FASH 111B and FASH 108.

Development of a professional-quality portfolio. Preparation of a resume. Design and create sample garments as shown in the portfolio. Attend an internship to observe and experience on-the-job practices creating a term project as a result of this experience. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

FASH 115 INTERMEDIATE COMPUTER-ASSISTED FASHION GRAPHICS

2.5 units

Prerequisite: *FASH 110.*

Intermediate fashion drawing, production flats, colorization, and scanning of images using the computer. Exploration of computer techniques and methods suitable for use in the apparel industry design room. Processes will apply to design courses and will utilize skills learned in previous Fashion department courses. Adobe Illustrator and Photoshop will be used as the vehicle for these processes. Total of 36 hours lecture and 36 hours laboratory.

Grade Mode: L, A

FASH 124 HISTORY OF COSTUME

3 units

History and research of dress from prehistoric to present period; relationships of related arts in evolution of garments. Total of 54 hours lecture.

Grade Mode: L, A

FASH 126 HISTORICAL COSTUME MAKING

3 units

Prerequisite: *FASH 001A.*

Historical costume construction using industrial sewing techniques suitable for costume shop and wardrobe. Samples demonstrating theatrical construction skills for historical costume periods. Analysis of script needs and historical research. Preparation of a sample costume and notebook. **Recommended** FASH 005, FASH 124. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

FASH 130 FASHION WORKSHOP

3 units

Prerequisite: *All of the following: FASH 108, FASH 005, FASH 111B.*

Creation of a fashion line for design through pattern making, construction and finishing. Pattern charts, costing, and spec sheets will be part of the process, as well as portfolio preparation. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

FIRE TECHNOLOGY

(Business and Engineering Technology Division)

FIRE 110 INTRODUCTION TO FIRE TECHNOLOGY

3 units

Provides an introduction to fire protection; career opportunities in fire protection and related fields; history of fire protection; fire loss analysis; public, quasi-public and pri-

vate fire protection services; specific fire protection functions; basic fire chemistry and physics. Total of 54 hours lecture.

Grade Mode: L, A

FIRE 112 FUNDAMENTALS OF FIRE BEHAVIOR AND CONTROL

3 units

Theories and fundamentals of how fires start, spread and are controlled. In depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents and fire control techniques. Total of 54 hours lecture.

Grade Mode: L, A

FIRE 114 FUNDAMENTALS OF FIRE PREVENTION

3 units

Prerequisite: *Enrollment in or completion of FIRE 110 or 112.*

Organization and function of fire prevention agencies; inspection, surveying and mapping procedures; recognition of fire hazards; engineering a solution to hazards; enforcement of solution; public relations. Total of 54 hours lecture.

Grade Mode: L, A

FIRE 115 FUNDAMENTALS OF PERSONAL SAFETY AND EMERGENCY ACTION

3 units

Provides basic skills in assessing fire dangers, handling common fire situations in the home and/or industry, basic CPR and standard first aid education. Study and investigate a lifestyle that promotes health, fitness, mental and physical preparation for and in an emergency profession. Does not meet CPR certification. Total of 54 hours lecture.

Grade Mode: L, A

FIRE 116 FIRE FIGHTING TACTICS AND STRATEGY

3 units

Prerequisite: *FIRE 110 or 112.*

Review of fire chemistry, equipment and manpower, basic fire fighting tactics and strategy; methods of attack; pre-planning fire problems. Total of 54 hours lecture.

Grade Mode: L, A

FIRE 120A HAZARDOUS MATERIALS

3 units

Review of basic chemistry; storage, handling, laws, standards and fire fighting practices pertaining to hazardous materials. Total of 54 hours lecture.

Grade Mode: L, A

FIRE 120B HAZARDOUS MATERIALS

3 units

Prerequisite: *FIRE 120A.*

Flammable metals, hazardous plastics, explosives, exotic fuels and oxidizers, radiation hazards, organic phosphate insecticides. Total of 54 hours lecture.

Grade Mode: L, A

FIRE 124 APPLIED CHEMISTRY

3 units

Applied chemistry for fire fighting and arson investigation. Atomic and molecular structure of materials; characteristics of chemical compounds; types of chemical reactions; nature of gaseous materials; organic chemicals and fuels, nuclear activity of atoms and atomic radiation; chemistry of fire prevention and suppression and human physiology and survival. Total of 54 hours lecture.

Grade Mode: L, A

FIRE 128 FUNDAMENTALS OF FIRE PROTECTION EQUIPMENT AND DETECTION

3 units

Prerequisite: Enrollment in or completion of FIRE 110 or 112.

This course covers the basic knowledge of fire protection within occupancies and applicable fire protection laws. Student will gain understanding in occupancy fire detection and alarms systems, heat and smoke controls, special protection systems, fire sprinklers, water supply, and portable fire extinguishers. Student will understand the installation, maintenance, operation and testing of fire protection systems. **Required** instructional trips. Total of 54 hours lecture.

Grade Mode: L, A

FIRE 142 BUILDING CONSTRUCTION FOR FIRE PROTECTION

3 units

Fundamental building construction and design, fire protection features, special considerations. Total of 54 hours lecture.

Grade Mode: L, A

FIRE 146 FIRE INVESTIGATION

3 units

Introduction to arson and incendiarism, arson laws and types of incendiary fires. Methods of determining fire causes, recognizing and preserving evidence, interviewing and detaining witnesses. Procedures in handling juveniles, court procedures and giving court testimony. Total of 54 hours lecture.

Grade Mode: L, A

FOREIGN LANGUAGE STUDY

(Languages Division)

FLNG 020 INDEPENDENT STUDY

1 unit Prerequisites: Level 4 of a foreign language or permission of department chairperson.

Individual projects such as readings in literature, theater, history, philosophy; written reports on analysis of films, videos. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, P

FLNG 021A-M FOREIGN LANGUAGE DEVELOPMENT 13 units

Prerequisite: Enrollment in or completion of Level 1 of the foreign language or placement based on the foreign language assessment process.

Development of the foreign language skills for teacher preparation through listening, speaking, and reading in a practical laboratory setting related to the foreign language course enrolled in or previously completed. This course is applicable toward the state requirement for CLAD (Cross-cultural Language Academic Development) for the multiple subject teaching credential. **For** teacher preparation majors but open to all qualified students. **Each** course 1 unit, and a total of 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A, P

FLNG 021A	ARMENIAN
FLNG 021B	ARABIC
FLNG 021C	CHINESE
FLNG 021D	FRENCH
FLNG 021E	GERMAN
FLNG 021H	ITALIAN
FLNG 021I	JAPANESE
FLNG 021J	LATIN
FLNG 021K	RUSSIAN
FLNG 021L	SPANISH
FLNG 021M	PORTUGUESE

FRENCH

(Languages Division)

FRNC 001 ELEMENTARY FRENCH

5 units

Pronunciation, speaking, reading and writing. Introduction to French culture. Corresponds to first year of high school French. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

FRNC 002 ELEMENTARY FRENCH**5 units**

Prerequisite: *FRNC 001, or the first year of high school French, or placement based on the foreign language assessment process.*

Conversational and written French: grammar essentials; introduction to modern France and the Francophone world. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

FRNC 003 INTERMEDIATE FRENCH**5 units**

Prerequisite: *FRNC 002 or two years of high school French or placement based on the foreign language assessment process.*

Development of oral and written communication skills based on 19th and 20th century French and Francophone readings; review of basic structure of French; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

FRNC 004 INTERMEDIATE FRENCH**5 units**

Prerequisite: *FRNC 003 or three years of high school French or placement based on the foreign language assessment process.*

Further development of written and oral communication skills based on 19th and 20th century French readings; finish review of basic structure of French; French and Francophone culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

FRNC 006 INTRODUCTION TO THE STUDY OF FRENCH AND FRANCOPHONE LITERATURE**4 units**

Prerequisite: *FRNC 004 or placement based on the foreign language assessment process.*

Selected readings in French and analysis of major Francophone authors that illustrate the French literary tradition from the Middle Ages to the present in both France and other French-speaking countries. Total of 72 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

FRNC 008A FRENCH CONVERSATION**2 units**

Prerequisite: *FRNC 002 or placement based on the foreign language assessment process.*

Practice in oral expression and comprehension of spoken French. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

FRNC 008B FRENCH CONVERSATION**2 units**

Prerequisite: *FRNC 002 or placement based on the foreign language assessment process.*

Practice in oral self-expression and understanding spoken French. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

FRNC 009A-B FRENCH CONVERSATION**4 units**

Prerequisite: *FRNC 003 or three years of high school French or placement based on the foreign language assessment process.*

Intensive practice at an advanced level in oral expression and comprehension of spoken French. **Each course** 2 units, and a total of 36 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

FRNC 010 FRENCH CIVILIZATION**3 units**

Customs, language, literature, geography, arts and sciences; contributions of France to civilization. French institutions from earliest to modern times. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

FRNC 011 TRANSLATING FROM FRENCH TO ENGLISH**2 units**

Prerequisite: *FRNC 002 or two years of high school French, or placement based on the foreign language assessment process.*

Grammar and structure of French; vocabulary building, acquisition of basic translation skills through reading authentic text selections from the Humanities, the Arts and Sciences. This course is designed for students in many disciplines. (Course conducted in English.) Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

FRNC 012 FRENCH LITERATURE IN TRANSLATION**3 units**

Prerequisite: *Placement based on the foreign language assessment process.*

Readings in English translation of key works of French and Francophone literature from the Middle Ages to the present. (Course conducted in English). Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

FRNC 014 WRITING IN FRENCH

3 units

Prerequisite: *FRNC 002 or two years of high school French or placement based on the foreign language assessment process.*

Intensive practice in French writing. Students acquire the techniques and strategies necessary to write French at an intermediate level. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

FRNC 015 READING IN FRENCH

3 units

Prerequisite: *FRNC 002 or placement based on the foreign language assessment process.*

Intensive training in reading authentic texts of a broad variety of genres in French. Reading of varied short texts; establishing a steadily increasing vocabulary. Introduction to literary texts. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

FRNC 016 FRENCH CULTURE AND COMMUNICATION

3 units

Prerequisite: *FRNC 002 or placement based on the foreign language assessment process.*

A second year course to build proficiency in listening, speaking, reading and writing while exploring the culture of France and the Francophone world. (Course conducted in French.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

FRNC 050 FRENCH CINEMA

3 units

Introduction to French cinema. The historical evolution of French cinema as an art form, with emphasis on major themes and directors including recent developments in French and Francophone film. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

FRNC 140 FRENCH PRONUNCIATION

2 units

Sounds of French; imitation of good pronunciation and intonation; reading of French texts. For those wishing to gain additional proficiency in pronunciation. Total of 36 hours lecture.

Grade Mode: L, A, P

GEOGRAPHY

(Natural Sciences Division)

Students planning to take more than six units of Geography should consult counselors. Some colleges allow full credit for the first six units only.

GEOG 001 PHYSICAL GEOGRAPHY

3 units

Introduction to the natural environment from a geographical perspective. Topics include geographic techniques, and their use to study air, water, land and life forms, with emphasis on their interconnections, interactions and world location patterns. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: GEOG 110*

Grade Mode: L, A, P

GEOG 001L PHYSICAL GEOGRAPHY LABORATORY

1 unit

Prerequisite: *Enrollment in or completion of GEOG 001.*

Observation and interpretation of meteorological phenomena including statistical analysis of climatic data. Cartographic techniques and map interpretation. Global patterns of the biosphere, hydrosphere and lithosphere, showing their regional interrelationships. **Required** instructional trips. Total of 54 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: GEOG 111*

Grade Mode: L, P

GEOG 002 CULTURAL GEOGRAPHY

3 units

Study of diverse human populations, their cultural origins, diffusion and contemporary spatial expressions. Topics include: demography, languages and religions, urbanization and landscape modification, political units and nationalism, and economic systems and development. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: GEOG 120*

Grade Mode: L, A, P

GEOG 003 WORLD REGIONAL GEOGRAPHY

3 units

Introductory study of the world's countries, cultures and cultural regions from a geographic perspective. Focus on individual countries, with topics including history, culture, society, economy, government, environment, and current issues. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: GEOG 125*

Grade Mode: L, A, P

GEOG 004 WEATHER AND CLIMATE

3 units

Introduction to weather and climate, the science of weather, weather forecasting and interpretation of meteorological

*Course Identification Numbering System (C-ID)

information available over the internet. **No credit** if taken after GEOL 024. Total of 54 hours lecture.
*Transfer Credit: CSU; UC. *C-ID: GEOG 130*
Grade Mode: L, A, P

GEOG 011 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS AND TECHNIQUES, WITH LAB

3 units

Introduction to the fundamentals of geospatial technology including Geographic Information Systems (GIS) science and its applications to spatial data management. Participants will learn how to identify and acquire GIS data, assess vector and raster systems, and apply scale, resolution, map projections, coordinate systems, use georeferencing, spatial analysis, modeling and Global Positioning Systems (GPS). This course is designed to complement other disciplines or as an entry level course into a geospatial program. Total of 36 hours lecture and 54 hours of laboratory.

*Transfer Credit: CSU; UC. *C-ID: GEOG 155*

Grade Mode: L, A

GEOG 012 MAP INTERPRETATION AND SPATIAL ANALYSIS

3 units

Prerequisite: GEOG 011.

Introduction to maps, images and geographic techniques. Develop skills through technologies such as map and aerial photograph interpretation, tabular data, spatial statistics, cartography, Global Positioning Systems (GPS), Internet mapping, remote sensing and Geographic Information Systems (GIS) that aid in data collection, analysis and presentation. Solve problems using geographic methods. Total 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

GEOG 013 DATA ACQUISITION AND MANAGEMENT
3 units

Prerequisite: GEOG 011.

Introduces fundamental concepts of primary GIS data creation. Topics include quantitative techniques for collection, classification, management of geographical data, and interpretation of a variety of data formats in GIS. Total of 36 hours lecture and 54 hours laboratory

Transfer Credit: CSU; UC

Grade Mode: L, A

GEOG 014 CARTOGRAPHIC DESIGN
3 units

Prerequisite: GEOG 011.

Introduction to fundamental cartographic concepts. Design principles and creation of effective visual representations of data in different formats. Topics include ethical and

appropriate application of map scale, map projections, generalization and symbolization. Total of 36 hours lecture and 54 hours laboratory

Transfer Credit: CSU; UC

Grade Mode: L, A

GEOG 020 INDEPENDENT STUDY

1 unit

Recommended Preparation: Enrollment in or completion of any college-level (1-99) course in the Natural Sciences.

Enrollment Limitation: Permission of the Dean.

Independent, faculty-guided student inquiry, project, research, laboratory experiment and/or field investigation. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

GEOG 030 FIELD STUDIES AND METHODS IN GEOGRAPHY

1 unit

Recommended preparation: GEOG 001.

Field studies of the geography of selected regions. Physical and cultural processes, characteristics and landscapes will be observed and analyzed. Specific physical and cultural content will vary by geographic region. **Required** instructional trips. Total of 18 hours lecture and 18 hours laboratory.

*Transfer Credit: CSU. *C-ID: GEOG 160*

Grade Mode: L, A, P

GEOLOGY

(Natural Sciences Division)

GEOL 001 PHYSICAL GEOLOGY

4 units

Principles of geology with emphasis on Earth processes with a focus on the internal structure and origin of the Earth and the processes that change and shape it. The laboratory component focuses on the identification of rocks and minerals, topographic and geologic map exercises demonstrating the work of water, wind, ice and gravity and effects of tectonic activity. **Recommended** enrollment in GEOL 001F. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: GEOL 100, 101*

Grade Mode: L, A, P

GEOL 001F PHYSICAL GEOLOGY FIELD STUDIES

1 unit

Prerequisite: Enrollment in or completion of GEOL 001.

Observation and interpretation of geological phenomena with emphasis on the origin and development of the geology of Southern California. **Required** four days of instruc-

**Course Identification Numbering System (C-ID)*

tional trips (equal to an average of two hours of trips each week). Total of 18 hours TBA lecture and 18 hours TBA laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

GEOL 002 HISTORICAL GEOLOGY

4 units

Prerequisite: GEOL 001 or GEOL 003.

History of earth and evolution of animals and plants including fossil specimens; emphasis on geology of North America. Total of 54 hours lecture and 54 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: GEOL 111*

Grade Mode: L, A, P

GEOL 002F HISTORICAL GEOLOGY FIELD STUDIES

1 unit

Prerequisite: Enrollment in or completion of GEOL 002.

Observation and interpretation of geologic phenomena with emphasis on the geologic history of North America. Required instructional trips (an average of two hours each week). Total of 18 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

GEOL 003 EARTH AND SPACE SCIENCE

4 units

Introduction to the principles and processes of earth and space sciences emphasizing the structure and composition of the solid earth, oceans and atmosphere and Earth's place within the solar system. **For** students planning on becoming K-12 teachers, but open to all qualified students. **No credit** if taken after GEOL 001 or GEOL 012. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: GEOL 121*

Grade Mode: L, A, P

GEOL 003F EARTH AND SPACE SCIENCE FIELD LABORATORY

1 unit

Prerequisite: Enrollment in or completion of GEOL 003.

Field observation and interpretation of Geologic, Oceanographic, Atmospheric and Astronomic phenomena. **Required** four days of instructional trips (equal to 2 hours of trips each week). Total of 18 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

GEOL 004 GEOLOGY OF CALIFORNIA

3 units

Prerequisite: GEOL 001 or 003.

An introduction to the geology of California, including tectonic processes, geologic structures, physiographic provinces, local rocks and minerals, landforms, natural resources, geologic history, and natural hazards in the state. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: GEOL 200*

Grade Mode: L, A, P

GEOL 005 GEOLOGIC MAPS

2 units

Prerequisite: GEOL 001 or GEOL 003.

The making of and use of geologic maps. Topics covered include analysis of topographic maps and geologic maps, measurement of thickness of sedimentary rocks, use of a Brunton Pocket Transit, and field analysis of stratigraphy, geologic structures, unconformities, and cross cutting relationships in the preparation of geologic maps.

Required: five days of instructional trips. Total of 18 hours lecture and 36 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

GEOL 006 MINERALOGY

4 units

Prerequisite: GEOL 001 and CHEM 001A.

Identification of minerals by physical and optical properties. Introduction to crystallography, and crystal chemistry and techniques of quantitative chemical analysis of minerals. Total of 54 hours lecture and 90 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: GEOL 280*

Grade Mode: L, A, P

GEOL 012 PHYSICAL OCEANOGRAPHY

3 units

Principles and practices of marine geology and physical oceanography. Plate tectonics and sea-floor spreading; oceanic volcanism and earthquakes. Study of man's use and misuse of the ocean: human needs vs. ecological limits. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

GEOL 012F PHYSICAL OCEANOGRAPHY FIELD STUDIES

1 unit

Prerequisite: Enrollment in or completion of GEOL 012.

Observation and interpretation of oceanographic phenomena with emphasis on the marine environment of the Southern California area. **Required** four days of instructional trips (equal to an average of two hours each week). Total of 18 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

**Course Identification Numbering System (C-ID)*

**GEOL 012L PHYSICAL OCEANOGRAPHY
LABORATORY**

1 unit

Prerequisite: *Enrollment in or completion of GEOL 012.*

Laboratory investigations of oceans, ocean basins and ocean margins. Oceanographic map and chart interpretation, rates of marine processes, ocean-atmosphere interactions, ocean structure and dynamics and coastal hazards. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

GEOL 020 INDEPENDENT STUDY

1 unit

Recommended Preparation: *Enrollment in or completion of any college-level (1-99) course in the Natural Sciences.*

Enrollment Limitation: *Permission of the Dean.*

Faculty-guided student research; laboratory experiments and field investigations. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, P

GEOL 021 HISTORY OF LIFE

3 units

Survey course that considers major biologic and geologic events from the formation of the Earth 4.6 billion years ago to the present day. Topics include origin and evolution of life, mass extinction and explosions in diversity, phylogenetic systematics, and orientation of major clades in the Tree of Life. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

GEOL 021L HISTORY OF LIFE LABORATORY

1 unit

Corequisite: *GEOL 021.*

Laboratory investigations and identification of fossil groups with emphasis on major clades and their position on the Tree of Life. Topics include patterns in the fossil record, extinctions, diversification, geologic time, and character diagnosis leading to the building of a cladogram. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

GEOL 022 THE AGE OF DINOSAURS

3 units

The historical geology and paleobiology of the Mesozoic Era. Topics covered include dinosaur origins, evolution, lifestyles, extinctions, and phylogenetic systematics. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

GEOL 023 NATURAL DISASTERS

3 units

The geologic origin and human impact of natural disasters. **No credit** if taken after GEOL 001 or 003. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

**GEOL 030A CHANNEL ISLANDS - COASTAL
CALIFORNIA**

2 units

Prerequisite: *Enrollment in or completion of GEOL 001 or 003.*

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

**GEOL 030B PENINSULAR RANGES - SALTON
DEPRESSION**

2 units

Prerequisite: *Enrollment in or completion of GEOL 001 or 003.*

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

GEOL 030C COAST RANGES - SAN ANDREAS FAULT

2 units

Prerequisite: *Enrollment in or completion of GEOL 001 or 003.*

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

GEOL 030D SIERRA NEVADA

2 units

Prerequisite: *Enrollment in or completion of GEOL 001 or 003.*

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

GEOL 030E OWENS VALLEY - DEATH VALLEY**2 units****Prerequisite:** Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

GEOL 030F ROCKY MOUNTAINS**2 units****Prerequisite:** Enrollment in or completion of GEOL 001.

Observation and interpretation of geologic phenomena with emphasis on the geologic history of western Cordillera.

Required instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

GEOL 030G KLAMATH MOUNTAINS - NORTHERN CALIFORNIA**2 units****Prerequisite:** Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

GEOL 030H INTERNATIONAL STUDY AREAS**2 units****Prerequisite:** Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

GEOL 030I PROBLEMS IN STRUCTURAL GEOLOGY**2 units****Prerequisite:** GEOL 001.

Field investigation of the structural geology in a region of selected interest. Observation and interpretation of geologic phenomena with emphasis on the geologic history of western Cordillera. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

GEOL 030J COLORADO PLATEAU**2 units****Prerequisite:** Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

GEOL 030K PROBLEMS IN REGIONAL STRATIGRAPHY**2 units****Prerequisite:** Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

GEOL 030L APPLICATIONS OF GLOBAL POSITIONING SYSTEM**2 units****Prerequisite:** Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

GEOL 030M PACIFIC RIM/PACIFIC ISLANDS**2 units****Prerequisite:** Enrollment in or completion of GEOL 001 or 003.

Field investigation of the regional geology in a national or international area of selected interest. **Required** instructional trips (an average of two hours each week). Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

GEOL 040 GEOLOGICAL FIELD LABORATORY**1 unit**

Observation and interpretation of geological phenomena in the field. **Required** four days of instructional trips. **Recommended** a 001-099 lab science course. Total of 18 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

GERMAN

(Languages Division)

GRMN 001 ELEMENTARY GERMAN

5 units

Pronunciation, reading, speaking and writing German; customs and culture. Corresponds to first year of high school German. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

GRMN 002 ELEMENTARY GERMAN

5 units

Prerequisite: GRMN 001, or the first year of high school German, or placement based on the foreign language assessment process.

Continuation of grammar essentials; practice in reading, speaking and writing German; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

GRMN 003 INTERMEDIATE GERMAN

5 units

Prerequisite: GRMN 002 or two years of high school German or placement based on the foreign language assessment process.

Development of communication skills based on 19th and 20th century German readings; review of basic structure of German: customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

GRMN 004 INTERMEDIATE GERMAN

5 units

Prerequisite: GRMN 003 or three years of high school German or placement based on the foreign language assessment process.

Further development of communication skills based on 19th and 20th century German readings; finish review of basic structure of German; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

GRMN 005 INTRODUCTION TO GERMAN LITERATURE

3 units

Prerequisite: GRMN 004 or placement based on the foreign language assessment process.

German drama, prose and poetry. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

GRMN 008A-C INTRODUCTION TO GERMAN CONVERSATION

6 units

Prerequisite: GRMN 002 or two years of high school German or placement based on the foreign language assessment process.

Practice in oral self-expression and understanding spoken German. **Each course** 2 units, and a total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

GRMN 009A-C GERMAN CONVERSATION

6 units

Prerequisite: GRMN 003 or three years of high school German or placement based on the foreign language assessment process.

Intensive practice at an advanced level in oral expression of spoken German. **Each course** 2 units, and a total of 36 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

GRMN 010 GERMAN CIVILIZATION

3 units

Geography, history and institutions; customs, language, literature, arts and sciences; German contributions to civilization. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

GRMN 012 GERMAN LITERATURE IN TRANSLATION

3 units

Reading and discussion of representative works of German literature in translation from different historical periods. Analysis of major themes and literary movements. Selected readings will be made from different genres, including poetry, drama, and prose. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

GRMN 140 GERMAN PRONUNCIATION

2 units

Introduction to the German sound system, basic stress and intonation patterns. Imitation and practice of proper pronunciation; reading of German texts. For beginners and those wishing to gain additional proficiency in pronunciation. Total of 36 hours lecture.

Grade Mode: L, A, P

GRMN 150A GERMAN FOR BUSINESS AND TRAVEL

2 units

Practical conversational German for business and travel.

Contemporary culture in German-speaking countries. Total of 36 hours lecture.

Grade Mode: L, A, P

GRMN 150B GERMAN FOR BUSINESS AND TRAVEL

2 units

Prerequisite: *GRMN 150A or placement based on the foreign language assessment process.*

Further practice in practical conversational German for business and travel. Contemporary culture in German-speaking areas. Total of 36 hours lecture.

Grade Mode: L, A, P

GERONTOLOGY

(Health Sciences Division)

GERO 001 INTRODUCTION TO GERONTOLOGY

3 units

Recommended Preparation: *ENGL 001A.*

Overview of the field of gerontology. Includes a multidisciplinary examination of how human aging is understood, including demographic trends, basic theories, concepts and philosophic ideas, social policies, planning issues, and services available to meet the needs and problems of older adults. Total of 54 hours of lecture.

Transfer Credit: CSU; UC

Grade Mode: L

GERO 022 DIRECTED STUDIES IN GERONTOLOGY

3 units

Prerequisite: *GERO 001.*

The Directed Studies course is a grouping of short seminars designed to provide students with the latest ideas in a specific area of concentration. The course content is thematic in nature and each seminar within the course differs from other offerings in the same course. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L

GERO 140 APPLIED HEALTH CARE MANAGEMENT IN GERONTOLOGY

3 units

Analysis of issues, services, methods, and interventions related to gerontologic practice and application of strategies for identifying and accessing services targeted for older adults and their families. Topics include the unique characteristics and needs of elders, the systems approach to working with elders, and issues affecting service delivery to this population (including diversity, gender, ethics, special health and mental health needs). Practice of the skills for effective service delivery to elders, families and caregivers with an emphasis on students'

attitudes and roles when working with this population. Total of 54 hours lecture.

Grade Mode: L

GLOBAL STUDIES

(Social Sciences Division)

GLBL 001 INTRODUCTION TO GLOBAL STUDIES

3 units

Study of globalization and related forms of social change. Analysis of economic, political, military, cultural, technological, and environmental aspects of globalization; history of globalization, European colonialism and decolonization processes; impact of multinational corporations and global political and financial institutions, and social movements from cross-cultural and global perspectives. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

GLBL 002 ISSUES IN GLOBAL STUDIES

3 units

Historical background, current status, and future possibilities of important transnational issues and challenges facing the global community. Topics include: economic development and inequality, basic human needs (food, water, health care), human rights, population trends (migration, refugees, human trafficking), international conflicts, and environmental problems. Emphasis on critical thinking about global governance, global responsibilities, and global citizenship. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

GRAPHIC COMMUNICATIONS TECHNOLOGY

(Visual Arts and Media Studies Division)

GRFX 010 INTRODUCTION TO GRAPHIC COMMUNICATIONS TECHNOLOGY

2 units

Introduction to printing and graphic arts. History of printing. Orientation to typesetting, camera, stripping and plates, presswork and bindery operations. Evaluation of printing processes: letterpress, gravure, screen printing, flexography, plateless printing and lithography. **Required** instructional trips. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

GRFX 013 SCREEN PRINTING PLASTICS

3 units

Hands-on training in screen meshes, tensioning and selection; direct emulsion stencil and exposure; printing and registration techniques for one, two and three color graphics for a variety of decal and adhesive materials. Right-reading, wrong-reading and front/back reading decals on a variety of substrates. Safety issues for water-based and solvent-based inks. Planning and organization of production-- individually and in teams. High-quality graphic printing and techniques for small business sales and marketing. **Required** instructional trips. Total of 27 hours lecture and 81 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

GRFX 021 PRINTING MANAGEMENT — PRODUCTION

3 units

Prerequisite: GRFX 105.

Theory and practical experience in production and quality control methods in a printing plant manufacturing situation. Projects in plant and department layout and organization. Maintenance and inventory control systems. Safety procedures. Applied organizational and management theory. New developments in the graphics arts industry. **Required** instructional trips. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

GRFX 030 BASIC COMPOSITION AND IMAGING

6 units

Introduction to document production methods and digital imaging techniques required in the graphic communications technology industry. Introduction to system operations and typographic principles. Graphic computer systems operation, terminology, system components, and principles. Emphasis on document production using text and image components. Use of industry standard Postscript electronic publishing systems. **Required** instructional trips. Total of 54 hours lecture and 162 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

GRFX 031 ADVANCED COMPOSITION AND IMAGING

6 units

Prerequisite: GRFX 030 or 220.

Advanced document production methods and digital imaging techniques. Use of electronic publishing systems and software applications for image capture and manipulation as practiced in the graphic communications technology industry. Advanced system operation and typographic principles. Emphasis on document development using image

processing systems. **Required** instructional trips. Total of 54 hours lecture and 162 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

GRFX 035 INTRODUCTION TO ELECTRONIC PREPRESS

2 units

Recommended preparation: GRFX 199.

Proper use of document layout, illustration and image-editing software necessary to prepare files for transfer or digital imaging. Terminology, materials, and methods used in electronic prepress. Introduction to preflighting, imposing, trapping, and correcting files used in electronic prepress operation. Strategies for font and color management, re-purposing images for the production of plates and proofs suitable for use in various printing operations. **Required** instructional trips. Total of 27 hours lecture and 36 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

GRFX 036 ELECTRONIC IMAGE ASSEMBLY

1 unit

Prerequisite: GRFX 035.

Procedures using electronic prepress applications to eliminate or repair errors in digital files. Skills in multiple page document construction, imposition and trapping required in modern digital workflows. Advanced study in Postscript imaging requirements for document output or transfer required in the graphic communications field. **Required** instructional trips. Total of 18 hours lecture and 36 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

GRFX 080 GRAPHIC REPRODUCTION FUNDAMENTALS

2 units

Graphic art skills, design, composition, printing and photographic processes. Total of 18 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

GRFX 102 TYPOGRAPHY

2 units

Terminologies of the typesetting/typography of the lithographic trade; exchange values and appropriate applications of numerical systems. Basic characteristics of type: styles, classifications, compatibilities, uses for emphasis, copyfitting, proofreading, spacing and design considerations. **Required** instructional trips. Total of 36 hours lecture.

Grade Mode: L, A

GRFX 103 INK, PAPER AND QUALITY CONTROL**2 units**

Classification of papers, common paper terms and calculation of press sheet cuts. Manufacture and uses of lithographic inks. Common quality control devices. **Required** instructional trips. Total of 36 hours lecture.

Grade Mode: L, A

GRFX 104 BINDERY AND FINISHING OPERATIONS**2 units**

Theory and demonstration of bindery and finishing operations: paper cutting, folding devices, assembling processes, including gathering, collating and inserting. Common binding processes: adhesive binding, side binding, saddle binding, self covers, soft covers and case bound covers. **Required** instructional trips. Total of 36 hours lecture.

Grade Mode: L, A

GRFX 105 INTRODUCTION TO PRINTING MANAGEMENT**2 units**

Printing plant supervision and management techniques. Principles of sales, manufacturing, finance, trade customs, organizational patterns, personnel practices and estimating procedures. Safety procedures, quality control, production scheduling, computer applications and technical developments. **Required** instructional trips. **Recommended** enrollment in or completion of GRFX 010. Total of 36 hours lecture.

Grade Mode: L, A

GRFX 113 INTERMEDIATE SCREEN PRINTING**3 units**

Prerequisite: GRFX 013.

History and industry overview. Safe use of inks, solvents and equipment. Process camera operation and photographic techniques for screen printing. Preparation of mechanicals using tight registration and printing on standard and unusual surfaces. **Required** instructional trips. **No credit** if taken after GRFX 132B or 134B. Total of 27 hours lecture and 81 hours laboratory.

Grade Mode: L, A

GRFX 114A PRODUCTION SCREEN PRINTING**3 units**

Prerequisite: GRFX 113.

Advanced work with color and design for commercial screen printing. Halftones and other advanced camera projects. Posters and ads. **Required** instructional trips. Total of 27 hours lecture and 81 hours laboratory.

Grade Mode: L, A

GRFX 114B ADVANCED SCREEN PRINTING**3 units**

Prerequisite: GRFX 114A.

Production of screen printing using the semi-automatic press and one-arm squeegee. Advanced work incorporating several stencil and/or ink systems. Principles of setup and operation of the small screen printing business. **Required** instructional trips. Total of 27 hours lecture and 81 hours laboratory.

Grade Mode: L, A

GRFX 115 BEGINNING SCREEN PRINTING FOR TEXTILE APPLICATIONS**2 units**

A basic course for the beginning screen printing student. Emphasis on artwork preparation, registration systems for multiple colors, screen selection and preparation for simple textile applications. Use of four-color rotary press, flash and belt dryers, pin systems for accuracy of registration. Safe use of materials and equipment. **Required** instructional trips. Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: L, A

GRFX 116 ADVANCED SCREEN PRINTING FOR TEXTILE APPLICATIONS**2 units**

Prerequisite: GRFX 115.

Advanced screen printing. Mesh selection, press set-up, registration and printing of exceedingly complex graphics, with four-color process on textiles; four-to six-color spot and index printing; special effects inks and sublimation dyes. Advanced use of heat press, dye sub printer. Planning and organization of all aspects of production individually and in teams. High-end and commercial printing on textile substrates. **Required** instructional trips. Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: L, A

GRFX 132A INTRODUCTORY SCREEN PRINTING**4 units**

Basic commercial production skills: hands-on training in screen meshes, tensioning and selection; direct emulsion stencil techniques and exposure; printing and registration techniques for one, two and three color graphics; single color halftone printing with water-based inks on paper and board substrates, some plastics. Planning and organization of all aspects of production individually and in teams. Point-of-purchase graphics, posters, flyers for advertising. **Required** instructional trips. Total of 36 hours lecture and 108 hours laboratory.

Grade Mode: L, A

GRFX 132B INTERMEDIATE SCREEN PRINTING**4 units****Prerequisite:** *GRFX 132A*.

Advanced production skills: in-depth work with halftone printing, including duotones and four-color process printing; four- to six- color spot printing; use of water-based and solvent-based vinyl and enamel inks. Emphasis on registration techniques for more complex printing work, including set-up and use of semi-automatic press. Planning and organization of all aspects of production individually and in teams. Point-of-purchase graphics, posters, flyers for advertising. **Required** instructional trips. Total of 36 hours lecture and 108 hours laboratory.

Grade Mode: L, A**GRFX 133A ADVANCED SCREEN PRINTING
FOR PLASTICS AND RIGID SUBSTRATES****4 units****Prerequisite:** *GRFX 132B*.

Advanced printing techniques for plastics, including electrostatic vinyl, adhesive vinyl, rigid plastics, glass and wood. Four-color process, sublimation dye printing, subsurface printing, etching for commercial signage and graphics; table printing and use of semi-automatic press. Safety issues for use of water-based and solvent-based inks. Planning and organization of all aspects of production individually and in teams. **Required** instructional trips. Total of 36 hours lecture and 108 hours laboratory.

Grade Mode: L, A**GRFX 133B PRODUCTION SCREEN PRINTING****5 units****Prerequisite:** *GRFX 133A*.

Production, using the semi-automatic press and one-arm squeegee. Printing modular design advanced work incorporating several stencil and/or ink systems. Discussions on setting up and operation of a small screen printing business. **Required** instructional trips. Total of 54 hours lecture and 108 hours laboratory.

Grade Mode: L, A**GRFX 134A SCREEN PRINTING FUNDAMENTALS
FOR SALES AND MARKETING****3 units**

Basic entrepreneur/printing class: hands-on training in screen meshes, tension and selection; conventional and non-conventional techniques for stencil application and exposure; printing and registration of one-, two- and three-color graphics; single-color halftone printing. Water-based and solvent-based inks on traditional and non-traditional two- and three-dimensional surfaces. Planning and organization of all aspects of production individually and in teams. Graphic printing for commercial sales and marketing. **Required** instructional trips. Total of 27 hours lecture and 81 hours laboratory.

Grade Mode: L, A**GRFX 134B SCREEN PRINTING FOR SALES
AND MARKETING****3 units****Prerequisite:** *GRFX 134A*.

Advanced entrepreneurial: high-end printing of duotones and four-color process printing; four-to six- spot color printing; wide variety of substrates using water-based, vinyl and enamel inks. Establishing a web sales presence. Planning and organization of all aspects of production individually and in teams. High-quality graphic printing and techniques for small business sales and marketing. **Required** instructional trips. Total of 27 hours lecture and 81 hours laboratory.

Grade Mode: L, A**GRFX 134C SCREEN PRINTING - TWO AND THREE
COLORS****2 units****Prerequisite:** *GRFX 134B*.

Design, layout and preparation of film and mechanicals for production printing. Correct selection and preparation of screens for commercial work. Establish proper printing procedures for a variety of substrates and ink systems used in the fine arts or industrial setting. Emphasis on proper registration of multiple colors and quality of printed goods. Safe use of materials and equipment. **Required** instructional trips. Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: L, A**GRFX 134D SCREEN PRINTING - FOUR AND SIX
COLORS****2 units****Prerequisite:** *GRFX 134C*.

Advanced concepts of layout and design as applied to preparation of mechanicals and screens for advanced production printing. Emphasis on precise registration of multiple colors, quality of ink application to substrate and printing of fine detail. Discussion of current trends in the industry. Use of the 4-color rotary textile printer, belt dryer and semi-automatic press for high quality production. Safe use of materials and equipment. **Required** instructional trips. Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: L, A**GRFX 135 INTRODUCTION TO ELECTRONIC
PREPRESS TECHNIQUES FOR
SCREEN PRINTING****2 units****Prerequisite:** *One of the following: GRFX 013, GRFX 115, GRFX 132A, or GRFX 134A.*

Beginning computer techniques class: evaluation, importing, scanning and correction of images for screen printing. Line art; basic single color halftones in positive and nega-

tive; making and trapping of spot colors; appropriate use of lettering and fonts for textile and flatstock printing applications. Effective use of output devices and substrates for screen transfer. **Required** instructional trips. Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: L, A

GRFX 137 SCREEN PRINTING TECHNIQUES FOR FLAT STOCK

2 units

Recommended Preparation: *GRFX 135*.

A specialized course designed to prepare students for screen printing careers in the production of posters, signs, and other flat stock. Techniques and procedures for printing by hand on tables and on a semi-automatic press. Use of letterpress equipment for poster production. Advanced techniques in design for impact, volume production and accurate registration of multiple color work. Safe use of materials and equipment. **Required** instructional trips. Total of 27 hours lecture and 45 hours laboratory.

Grade Mode: L, A

GRFX 161 INTRODUCTION TO OFFSET PRESS TECHNIQUES

2 units

Prerequisite: *GRFX 010*.

Evaluation of photo offset lithography from press to bindery. History of printing, types of sheet-fed duplicators/presses and configurations of web-fed equipment. Characteristics of fountain solutions, feeding, dampening, inking and delivery systems. Paper and ink considerations for offset lithography. Common bindery procedures related to offset printing. **Required** interviews, demonstrations and instructional trips. **No credit** if taken after GRFX 162 or 260. Total of 36 hours lecture.

Grade Mode: L, A

GRFX 165 ON-DEMAND PRINTING AND PUBLISHING SYSTEMS

1 unit

The proper use and functions of on-demand printing systems. Operation, programming and running of the DocuTech and digital color publishing systems. Overview of the size, scope and career opportunities found in the printing and publishing industry. Use and selection of papers, bindery methods, computers, safety practices and finishing operations required in the on-demand publishing field. Training in customer service techniques, job planning and quality aspects used in this segment of the printing field. **Required** instructional trips. Total of 18 hours lecture and 18 hours laboratory.

Grade Mode: L, A

GRFX 190 IMAGING TECHNIQUES FOR LARGE FORMAT PRINTING

2 units

Prerequisite: *GRFX 030 or GRFX 220*.

Digital imaging techniques for production of large format graphics, including banners and vehicle wraps. File preparation, troubleshooting, Raster Imaging Processor issues, work flow concepts. Estimating, production planning, and material selection are also covered. **Maximum credit** 4 units, 2 units each semester. **Required** field trips. Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: L, A

GRFX 199 INTRODUCTION TO DESKTOP PUBLISHING

3 units

Introduction to desktop publishing. Basic DTP components. Written, visual and computer skills used to create and produce original documents specific to the student's major. Overview of career opportunities by faculty from various disciplines. **May not be taken concurrently** with or after JOUR 199. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A

GRFX 202 PRINTING MANAGEMENT — ESTIMATING

5 units

Theory and practice in planning for print production. Estimating for printing including art preparation, photographic procedures, image assembly, press selection and finishing methods. Analysis of printing orders from sales through invoicing, use of trade customs, computers in estimating and sales management for the printing industry. Proper uses of forms, pricing books and estimating standards for the printing industry. Total of 90 hours lecture.

Grade Mode: L, A

GRFX 220 BASIC DIGITAL IMAGING

3 units

Introduction to document creation for print, web, or other final product. Image acquisition, assessment, editing, correction using programs such as Adobe Photoshop. Creation of digital documents using programs such as Adobe InDesign and Dreamweaver. Exposure to client, production team, and outside vendor relationships. **Required** instructional trips. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A

GRFX 221 ADVANCED DIGITAL IMAGING - WEB

3 units

Prerequisite: *GRFX 220*.

Intermediate digital document production. Image acquisition, assessment, editing and correction using programs such as Adobe Photoshop. Automated photo processing and editing techniques. Creation of digital documents using programs such as Adobe InDesign for print and e-publication, including interactive documents. Exposure to client, production team and outside vendor issues. **Required** instructional trips. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A

GRFX 222 INTERMEDIATE DIGITAL IMAGING - PRINT

3 units

Prerequisite: *GRFX 220.*

Intermediate digital document production. Image acquisition, assessment, editing and correction using programs such as Adobe Photoshop. Automated photo processing and editing techniques. Creation of digital documents using programs such as Adobe InDesign for print and e-publication, including interactive documents. Exposure to client, production team and outside vendor issues. **Required** instructional trips. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A

GRFX 244 COLOR SEPARATION THEORY AND PRINTING PRODUCTION

3 units

Prerequisite: *GRFX 240 or 146.*

An introduction to color theory, separation methods and productions techniques using the electronic scanner, desktop technology and photo-manipulation software. Principles of analog and digital color proofing. Examination of color vision, color calibration, evaluation, color originals, correction methods and printing production standards employed in the printing field. Review of scanner formats, digital color systems, and imagesetting for the color service bureau and printing industry. **Required** instructional trips. Total of 54 hours lecture.

Grade Mode: L, A

GRFX 245A BASIC PHOTOSHOP TECHNIQUES FOR GRAPHIC COMMUNICATIONS TECHNOLOGY

3 units

Prerequisite: *GRFX 030 or 035 or 220.*

Recommended preparation: *GRFX 244.*

Training in the proper techniques to adjust and modify images based upon the workflow and output requirements using PhotoShop software tools. Study of color theory models, separation requirements, resolution issues, proofing methods and file formats necessary in a digital workflow. Correct techniques in the operation of both the hardware and software of a flatbed scanners. Practice in the correction for quality reproduction of scanned images. Instruction

in the electronic masking techniques in conjunction with the use of channels, masks and layers for image-editing, special effects and color correction as required in the printing industry. **Required** instructional trips. Total of 18 hours lecture and 108 hours laboratory.

Grade Mode: L, A

GRFX 245B ADVANCED PHOTOSHOP TECHNIQUES FOR GRAPHIC COMMUNICATIONS TECHNOLOGY

3 units

Prerequisite: *GRFX 245A.*

Advanced techniques focusing on color correction, image editing and image preparation using PhotoShop application software. Instruction on digital editing methods to achieve color enhancements required in the production of printing images. Training in advanced PhotoShop applications for masking, the use of channels or layers as required by various digital-imaging systems. Use of color management systems and the evaluation of digital color proofing systems. **Required** instructional trips. Total of 18 hours lecture and 108 hours laboratory.

Grade Mode: L, A

GRFX 300A-G PRODUCTION PRINTING

14 units

Prerequisite: *One of the following: GRFX 113, 121, 132B, 134B, or 163.*

Production experience working with a wide variety of jobs. Individualized production training on live printing jobs. Deadlines, quality levels and production responsibilities expected from employees outside of the educational environment. **Each course** 2 units, 4 hours. Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: L, A

HEALTH EDUCATION

(Kinesiology, Health and Athletics Division)

HED 002A, E HEALTH EDUCATION-CONTEMPORARY HEALTH ISSUES

2 units

General aspects of personal and community health issues. **No credit** if taken after HED 044. **Each course** 2 units and a total of 36 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

HED 002A CONTEMPORARY HEALTH ISSUES

Includes drug education and the effects of the use of tobacco, alcohol, narcotics and other drugs, and sex education.

HED 002E HUMAN SEXUALITY; SELF-ESTEEM

Transfer Credit: CSU

HED 020 INDEPENDENT STUDY**1 unit**

Prerequisites: One semester in health education and permission of department chairperson.

Student project on topics in health; emphasis on research techniques, written reports. Total of 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A, P

HED 044 HEALTH EDUCATION**3 units**

Physical and mental health factors; individual, community and school health concepts; the effects of the use of tobacco, alcohol, narcotics and other drugs and dangerous substances; effects of sexually transmitted diseases and the importance of health and nutrition. **Recommended** for majors in physical education, health education, and elementary education, and for students seeking a teaching credential but open to all qualified students. Total of 54 hours lecture.

Transfer credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

HED 050 INTRODUCTION TO PUBLIC HEALTH**3 units**

The basic concepts and terminologies of public health, and the history and accomplishments of public health officials and agencies. Overview of the functions of various public health professions and institutions, and an in-depth examination of the field of public health. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: PHS 101

Grade Mode: L, A, P

HED 051 HEALTH AND SOCIAL JUSTICE**3 units**

Introduction to health inequities in the United States. How education, socioeconomic status, racism, and gender impact health outcomes, access to health care, and policy development. Analysis of public health issues and social justice. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: PHS 102

Grade Mode: L, A, P

HED 052 DRUGS, HEALTH, AND SOCIETY**3 units**

Concepts, theories, epidemiology and toxicology of substance abuse and its relevance to personal and public health. Emphasis on the biological, psychological, and social effects of drug use on the health of individuals, and on society. Discussion of concepts such as substance use versus misuse, abuse, and dependence. Risk factors, signs and symptoms, mental illnesses, and treatments and

prevention theories associated with addiction. Total 54 hours of lecture.

Transfer Credit: CSU; UC. *C-ID: PHS 103

Grade Mode: L, A, P

HISTORY**(Social Sciences Division)****HIST 001A HISTORY OF EUROPEAN CIVILIZATION TO 1715****3 units**

Prehistoric man; ancient Near Eastern civilizations; Greeks and Hellenization; the Roman Empire. Emergence of European, Byzantine and Islamic civilizations; manorialism and feudalism. Crusades, cities, medieval kingdoms. Humanism and Reformation. **No credit** if taken after HIST 003A or 003B. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: HIST 170

Grade Mode: L, A, P

HIST 001B HISTORY OF EUROPEAN CIVILIZATION FROM 1715**3 units**

Survey of European history from 1715. Course includes the Enlightenment, Scientific Revolution, French Revolution, Napoleon, Western Imperialism, two World Wars, Cold War and the political, social and economic consequences of each. **No credit** if taken after HIST 003C or 003D. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: HIST 180

Grade Mode: L, A, P

HIST 002A HISTORY OF WORLD CIVILIZATIONS TO 1500**3 units**

Survey of emerging regional cultures and societies from the earliest civilizations to 1500. Consideration given to comparative and integrative analysis of their contributions to the fabric of world civilization. Particular focus on cultural evolutionary parallels and the diffusion of ideas through migration and trade on a global scale. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: HIST 150

Grade Mode: L, A, P

HIST 002B HISTORY OF WORLD CIVILIZATIONS FROM 1500**3 units**

Survey of world history from 1500's regional isolation to modern day globalism and its issues and problems. Consideration given to the political, economic, social, and intellectual forces present in the rise of the modern world. Particular focus on the interrelatedness of historical events

*Course Identification Numbering System (C-ID)

and on the comparisons of cultures and societies in a historical perspective. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: HIST 160*

Grade Mode: L, A, P

HIST 005A HISTORY OF GREAT BRITAIN TO 1714

3 units

Formation and expansion of early English governmental institutions, social systems and economic organizations; relations with continental Europe. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 005B HISTORY OF GREAT BRITAIN FROM 1714

3 units

Development of British political institutions, formation of the empire, social and economic progress, relations with other nations, influence of English law and literature on American institutions. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 007A UNITED STATES HISTORY TO 1876

3 units

American history from its first peoples through the 1870s Reconstruction Era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Emphasis placed on comparing different ethnicities, women, and representative biographies. **No credit** if taken after HIST 007AH. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: HIST 130*

Grade Mode: L, A, P

HIST 007AH HONORS UNITED STATES HISTORY TO 1876

3 units

Enrollment Limitation: *Acceptance into the Honors Program.*

American history from its first peoples through the 1870s Reconstruction Era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Emphasis placed on comparing different ethnicities, women, and representative biographies. This enriched course is designed for the Honors Program allowing more student-directed discussion and more extensive writing assignments. **No credit** if taken after HIST 007A. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A, P

HIST 007B UNITED STATES HISTORY FROM 1876

3 units

American history from 1876 to the present. Topics include industrialization, Progressivism, World Wars, Depression, the Cold War, the Civil Rights and Vietnam Era, and the 21st century. Emphasis placed on immigrant and racial groups, women, international relations, and contemporary topics. **No credit** if taken after HIST 007BH. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: HIST 140*

Grade Mode: L, A, P

HIST 007BH HONORS UNITED STATES HISTORY FROM 1876

3 units

Enrollment Limitation: *Acceptance into the Honors Program.*

American history from 1876 to the present. Topics include industrialization, Progressivism, World Wars, Depression, the Cold War, the Civil Rights and Vietnam Era, and the 21st century. Emphasis placed on immigrant and racial groups, women, international relations, and contemporary topics. This enriched course is designed for the Honors Program allowing more student-directed discussion and more extensive writing assignments. **No credit** if taken after HIST 007B. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A, P

HIST 008 HISTORY OF CALIFORNIA

3 units

California's history from its beginnings to the modern era. Explores the multicultural and multifaceted "Golden State" and its political, economic, and sociocultural development on the west coast of the United States. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 009A LATIN AMERICA: PRE-COLUMBIAN TO 1825

3 units

Latin American history from pre-Columbian times to the independence of Latin American lands; emphasis on institutions of the past which have shaped conditions of the present; relations between Latin America and the United States. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 009B LATIN AMERICA: 1825 TO THE PRESENT

3 units

Social, economic and political history of Latin America from independence to the present. Legacy of colonialism; development of cultural, political, and economic institu-

**Course Identification Numbering System (C-ID)*

tions; relations between Latin America and the United States foreign policies. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 012 THE NORTH AMERICAN INDIAN

3 units

Ethnic history of North American Indians; major native groups; social and cultural organizations; political and economic systems; U.S. government policies; reservation status; contemporary issues and problems. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 016 HISTORY OF THE MIDDLE EAST

3 units

The Middle East from prehistoric times to the present; the geographic characteristics of the region; emphasis on the cultural, religious and social development of the various peoples of this area. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 018 HISTORY OF SOUTH ASIA, SOUTHEAST ASIA AND THE PACIFIC

3 units

Examination of South Asia, Southeast Asia and the Pacific from prehistoric times to the present; the geopolitical importance of these areas; emphasis on the cultural, religious and social development of the peoples in history. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 019 HISTORY OF CHINA, JAPAN AND KOREA

3 units

Civilizations of China, Japan and Korea from prehistoric times to the present; emphasis on cultural, religious and social developments. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 020 INDEPENDENT STUDY

1 unit

Prerequisite: *Permission of History instructor and Dean.*

Independent, faculty-guided student inquiry, research, project of historical theme. Total of 54 hours laboratory

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, P

HIST 025B WOMEN IN AMERICAN SOCIETY

3 units

American women's history and experiences from pre-colo-

nial era to the present. Emphasis on multicultural perspectives, social justice movements, and sociopolitical issues in the context of U.S. and global history. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 025D AMERICA'S RELATIONS WITH OTHER NATIONS

3 units

Selected themes, problems, and personalities which have been associated with the creation of American democratic institutions. How U.S. involvements with nations in Europe, Latin America, the Middle East, Africa, and Asia have been associated with the creation of American democratic institutions. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 025F AMERICA AND THE TWO WORLD WARS

3 units

Causes and consequences of 20th century's two world wars. Consideration will be given to the nationalism, imperialism, and the geo-political forces leading to war and influencing the subsequent peace, and the transformation of global political, economic, social, and intellectual traditions due to modern warfare. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 025I ISSUES OF THE VIETNAM ERA

3 units

Identification and analysis of key issues and events of the Vietnam era emphasizing the Vietnam War, the civil rights movement, the anti-war protests, and the space exploration programs. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 027A TRADITIONAL AFRICA

3 units

The history of Africa from scientific origins of humans through the 19th century with focus on the Nile Valley civilizations, the Agekoyo and Maasai of East Africa, Angola, the kingdoms of the Western Sudan, Uganda, the Swahili city states, and the Zulu empire; influence of Islam and Christianity on Africa. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 027B MODERN AFRICA

3 units

The history of Africa from partition to colonialism in the 19th century to modern day developments; nationalistic

movements, independence, and nation building; development of Pan-Africanism; African relations with the United States and in the global arena. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 029A AFRICAN AMERICAN HISTORY TO 1865

3 units

Legacy of African Americans from origins in Africa through the Civil War; African heritage; slave trade and slavery in colonial America; African Americans and the American Revolution, the new nation, and westward expansion, slave revolts, abolition, and the Civil War. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 029B AFRICAN AMERICAN HISTORY FROM 1865

3 units

African American experience from Reconstruction to modern days; end of Reconstruction and beginning of Black Codes and Jim Crow policies; Washington, DuBois, and the Harlem Renaissance; pan-Africanism; African Americans and the world wars; civil rights movement and nationalistic movements. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 030 HISTORY OF MEXICO

3 units

Mexico from pre-Columbian times to the early national period; political, economic, social and cultural developments; inter-American relations. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 031 HISTORY OF MEXICAN AMERICANS IN THE UNITED STATES

3 units

Survey of U.S. history from the Mexican American perspective covering historical periods from pre-European settlements to 21st century. Emphasis is placed on the experiences, problems, and contributions of Mexican Americans and the formation of Mexican American societies within the context of U.S. history. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 041 HISTORY OF ASIAN PACIFIC AMERICANS

3 units

Asian Pacific American experiences and contributions to United States history spanning the years from the pioneering 49ers through the Japanese American internment camp

experience to the post-1965 immigration waves and refugees in an era of globalization. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

HIST 110 SKILLS FOR COLLEGE SUCCESS IN HISTORY

1 unit

Development of essential study techniques for success in history courses; orientation to applications of computer-based technologies in history; time management; textbook mastery, lecture outlining, test taking, and critical analysis. Total of 18 hours lecture.

Grade Mode: L, A, P

HOSPITALITY

(Business and Engineering Technology Division)

HOSP 001 INTRODUCTION TO THE HOSPITALITY INDUSTRY

3 units

Overview of the structure and operation of the hospitality industry with an emphasis on hotels, restaurants, casinos, and resorts. History of the industry; relationship between various components of the hospitality industry. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

HOSP 002 HOSPITALITY SUPERVISION AND HUMAN RESOURCES MANAGEMENT

3 units

Supervision of hospitality personnel through the application of management concepts and techniques, including planning, organizing, staffing, directing, controlling, delegation, and decision-making. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

HOSP 004 HOSPITALITY SANITATION, SAFETY AND ENVIRONMENTAL ISSUES MANAGEMENT

3 units

Introduction to food service sanitation and safety as it relates to hospitality management. Food-borne illness identification and its prevention, OSHA's current regulations, safety maintenance and prevention, basic first aid, fire control, safety and prevention. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

HOSP 101 HOSPITALITY INTERNSHIP**3 units**

Prerequisite: *Maintain enrollment in 7 units or more, including field practice and enrollment in one or more required courses in the Hospitality Management program.*

Approved professional broad-based work experience in the hospitality industry. Experience can be either paid or unpaid internship. Total of 270 hours field practice.

Grade Mode: L, A**HOSP 130 HOSPITALITY MARKETING, SALES AND ADVERTISING****3 units**

Application of marketing principles and techniques in the hospitality industry. Emphasis on developing and understanding of consumers. Using consumer knowledge to provide value and create customer satisfaction while meeting financial goals, a focus on practical sales techniques proven approaches to selling to targeted markets and advertising's role in sales. Total of 54 hours lecture.

Grade Mode: L, A**HUMANITIES****(Social Sciences Division)****HUM 001 INTRODUCTION TO THE HUMANITIES****3 units**

Present-day ideas, beliefs, values, and practices are explored in the artistic, literary, philosophical, and religious contributions to modern living from diverse creative epochs and individuals of various cultures. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, P**HUM 002 HUMANITIES, SCIENCE AND TECHNOLOGY****3 units**

Interrelationships between the humanities, the sciences and technology in modern society; an interdisciplinary course. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**HUM 003 HUMANITIES AND THE SOCIAL SCIENCES****3 units**

Interdisciplinary overview combining methods from the humanities and social sciences to interpret major economic, political and social forces which have influenced the relationship between the individual and society in a diverse set of cultural and historic contexts. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**HUM 004 HUMANITIES THROUGH THE ARTS****3 units**

Overview of the development of concepts of self and human values through film, drama, music, literature, painting, sculpture and architecture. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**HUM 020 INDEPENDENT STUDY****1 unit**

Prerequisites: *Enrollment in or completion of HUM 001, 002, or 003 and permission of department chairperson.*

Individual projects; research techniques; written reports. Total of 54 hours laboratory.

*Transfer Credit: CSU; UC credit limitations. See counselor.***Grade Mode:** L, A**ITALIAN****(Languages Division)****ITAL 001 ELEMENTARY ITALIAN****5 units**

Pronunciation and grammar. Speaking, reading and writing. Introduction to Italian geography, history, culture and music. Corresponds to first year of high school Italian. Total of 90 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**ITAL 002 ELEMENTARY ITALIAN – LEVEL 2****5 units**

Prerequisite: *ITAL 001, or the first year of high school Italian, or placement based on the foreign language assessment process.*

Grammar essentials, especially irregular verbs; practice in conversation. Institutions, customs, culture, songs and poems of Italy. Total of 90 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, P**ITAL 003 INTERMEDIATE ITALIAN****5 units**

Prerequisite: *ITAL 002, or two years of high school Italian, or placement based on the foreign language assessment process.*

Development of communication skills based on 19th and 20th century Italian readings; review of basic structure of Italian; customs and culture. Corresponds to the third year of High School Italian. Total of 90 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P

ITAL 004 INTERMEDIATE ITALIAN**5 units**

Prerequisite: *ITAL 003, or three years of high school Italian, or placement based on the foreign language assessment process.*

Further development of communication skills based on 19th and 20th century Italian readings; finish review of basic structure of Italian; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ITAL 008A INTRODUCTION TO ITALIAN CONVERSATION**2 units**

Prerequisite: *ITAL 002 or two years of high school Italian or placement based on the foreign language assessment process.*

Practice in oral self-expression and understanding spoken Italian. **For** majors in music, fine arts and humanities, but open to all qualified students. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

ITAL 008B INTRODUCTION TO ITALIAN CONVERSATION**2 units**

Prerequisite: *ITAL 008A.*

Further practice in oral self-expression and understanding spoken Italian. Emphasis on culture and history. **For** majors in music, fine arts and humanities, but open to all qualified students. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

ITAL 009A INTERMEDIATE ITALIAN CONVERSATION – LEVEL 1**2 units**

Prerequisite: *ITAL 003 or three years of high school Italian or placement based on the foreign language assessment process.*

Intensive practice at an intermediate level in oral expression and comprehension of spoken Italian. Total of 36 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ITAL 009B INTERMEDIATE ITALIAN CONVERSATION – LEVEL 2**2 units**

Prerequisite: *ITAL 009A or placement based on the foreign language assessment process.*

Intensive practice at an upper intermediate level in oral expression and comprehension of spoken Italian with focus on socio-historic aspects of Italian life and culture. Total of 36 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ITAL 009C INTERMEDIATE ITALIAN CONVERSATION – LEVEL 3**2 units**

Prerequisite: *ITAL 009B or placement based on the foreign language assessment process.*

Intensive practice at an advanced level in oral expression and comprehension of spoken Italian with focus on the specialized vocabulary related to social events and discussion of on-going political and cultural issues. Total of 36 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ITAL 010 ITALIAN CIVILIZATION**3 units**

Customs, language, literature, geography, arts and sciences; contributions of Italy to civilization, from earliest to modern times. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ITAL 012 INTRODUCTION TO ITALIAN LITERATURE**3 units**

Prerequisite: *Eligibility for ENGL 001A.*

Investigation of main topics, genres, and authors of Italian Literature. Cultural, social and historical background of significant works in Italian fiction, poetry, prose. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

ITAL 050 ITALIAN FILM AS DRAMATIC LITERATURE**3 units**

Prerequisite: *Eligibility for ENGL 001A.*

Italian culture, society, politics and historical periods through the viewing and discussion of Italian films from Neorealism to contemporary cinema. Critical analysis of film types, directors, movements through lecture, discussion, and writing. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

JAPANESE**(Languages Division)****JAPN 001 ELEMENTARY JAPANESE****5 units**

Basic vocabulary, useful phrases; reading, writing and speaking. Introduction to geography, customs and culture. Corresponds to first year of high school Japanese. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

JAPN 002 ELEMENTARY JAPANESE**5 units**

Prerequisite: JAPN 001, or the first year of high school Japanese, or placement based on the foreign language assessment process.

Grammar; oral and written composition; reading of elementary texts; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, P

JAPN 003 INTERMEDIATE JAPANESE**5 units**

Prerequisite: JAPN 002 or two years of high school Japanese or placement based on the foreign language assessment process.

Grammar; oral and written composition; reading of intermediate texts; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

JAPN 004 INTERMEDIATE JAPANESE**5 units**

Prerequisite: JAPN 003 or three years of high school Japanese or placement based on the foreign language assessment process.

Continuation of grammar, oral and written composition; reading of texts of moderate difficulty; customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

JAPN 005 ADVANCED READING AND COMPOSITION**3 units**

Prerequisite: JAPN 004 or placement based on the foreign language assessment process.

Reading and discussion of Japanese fictional and non-fictional texts. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

JAPN 008A INTRODUCTION TO JAPANESE CONVERSATION**2 units**

Prerequisite: JAPN 002 or two years of high school Japanese or placement based on the foreign language assessment process.

Practice in oral self-expression and understanding spoken Japanese. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

JAPN 008B INTRODUCTION TO JAPANESE CONVERSATION**2 units**

Prerequisite: JAPN 002 or two years of high school Japanese or placement based on the foreign language assessment process.

Practice in oral self-expression and understanding spoken Japanese with emphasis on personal interactions and conversation. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

JAPN 009A JAPANESE CONVERSATION**2 units**

Prerequisite: JAPN 003, 008A-B, three years of high school Japanese, or placement based on the foreign language assessment process.

Intensive practice in oral expression and comprehension of spoken Japanese. Total of 36 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

JAPN 009B JAPANESE CONVERSATION**2 units**

Prerequisite: JAPN 003 or three years of high school Japanese or placement based on the foreign language assessment process.

Intensive practice in oral expression and comprehension of spoken Japanese with focus on socio-historic aspects of Japanese life. Total of 36 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

JAPN 009C JAPANESE CONVERSATION**2 units**

Prerequisite: JAPN 003 or three years of high school Japanese, or placement based on the foreign language assessment process.

Intensive practice in oral expression and comprehension of spoken Japanese with focus on the specialized vocabulary related to social events and discussion of on-going political issues. Total of 36 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

JAPN 010 JAPANESE CIVILIZATION**3 units**

Geography, history and institutions; customs, language, literature, arts and sciences; Japanese contributions to civilization. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

JAPN 011 INSIDE JAPAN**1 unit**

Modern Japan; the culture, business and industry, education, politics, foreign affairs. (Course conducted in English.) Total of 18 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

JAPN 012 JAPANESE LITERATURE IN TRANSLATION**3 units**

Reading and discussion of Japanese literature and its traditions from the 9th century to the present. The emphasis is placed on the unique qualities of its cultural identity. Selected readings will reveal both the stereotypes and anti-stereotypical Japanese characters. A comparative analysis is applied to many genres such as oral traditions, performing arts, films, comics, and animation (anime). Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

JOURNALISM

(Visual Arts and Media Studies Division)

JOUR 002 BEGINNING JOURNALISM**3 units**

Fundamental principles and practices of newswriting. Standards, ethics, rights, responsibilities and laws of libel. Media literacy. New media. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: JOUR 110*

Grade Mode: L, A

JOUR 004A REPORTING AND NEWSWRITING**3 units**

Prerequisite: JOUR 002.

Recommended Preparation: JOUR 007A; keyboarding ability.

Fundamentals of newswriting and reporting: language, style, organization and structure. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: JOUR 210*

Grade Mode: L, A

JOUR 005 MAGAZINE AND SMALL PUBLICATIONS**3 units**

Introduction to magazine and small publication production with emphasis on developing, researching, interviewing and writing non-fiction articles. Includes complete presentation of stories, photos, design and layout. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A, P

JOUR 007A NEWSWRITING AND MAKE-UP**4 units**

Prerequisite: JOUR 002.

Opportunity to work on the campus newspaper, the Courier. Interviewing, writing copy and mastering the processes connected with the publication of a newspaper. **Required** of all members of newspaper staff. Total of 54 hours lecture and 54 hours laboratory.

*Transfer Credit: CSU. *C-ID: JOUR 130*

Grade Mode: L, A

JOUR 007B NEWSWRITING AND MAKE-UP**4 units**

Prerequisite: JOUR 007A.

Opportunity to work as an editor on the campus newspaper, the Courier, and its online edition. Writing and editing copy and headlines, laying out pages for publication, and mastering the editing processes connected with the publication of a weekly newspaper and its online edition. **Required** of all members of the newspaper's editorial board. Total of 54 hours lecture and 54 hours laboratory.

*Transfer Credit: CSU. *C-ID: JOUR 131*

Grade Mode: L, A

JOUR 009 PUBLIC RELATIONS AND ORGANIZATIONAL COMMUNICATION**3 units**

Basic aspects of public relations and organizational communication for corporate, entertainment, non-profit, and other targeted organizations. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: JOUR 150*

Grade Mode: L, A, P

JOUR 022 ADVANCED PRESS PHOTOGRAPHY**3 units**

Prerequisite: JOUR 021 or PHOT 021.

News, feature and sports photography, with introduction to picture scanning and digital manipulation techniques. Assignments on all college publications. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A, P

JOUR 023 PHOTOJOURNALISM**3 units**

Prerequisite: JOUR 021 or PHOT 021.

Picture series, essays and stories with assignments on various college publications. Historic and current trends in photojournalism and contemporary publications. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU. *C-ID: JOUR 160*

Grade Mode: L, A, P

JOUR 107A ONLINE JOURNALISM

4 units

Prerequisite: *JOUR 007A or placement based on the Journalism assessment process.*

Opportunity to work on the campus newspaper, the Courier, and its online edition. Reporting and writing news and feature stories. Navigating software used for online publishing. Mastering the skills of online journalism, including blogs, bulletins, breaking news, multimedia and social media. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L, A

JOUR 107B NEWS LEADERSHIP

4 units

Prerequisite: *JOUR 007A or placement based on the Journalism assessment process.*

Opportunity to work as a manager on the campus newspaper, the Courier, and its online edition. Reporting, writing and editing news and feature stories. News judgment. Online publishing. Leadership managing peers in their roles in the newsroom as reporters, photographers and editors. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L, A

JOUR 110 JOURNALISM FIELD PRACTICE

3 units

Prerequisites: *Maintain enrollment in 7 units or more including field practice.*

Supervised field experience in selected public and private journalism enterprises. **Minimum** of 15 hours of field practice each week. Total of 270 hours field practice.

Grade Mode: L, A, P

KINESIOLOGY - ACTIVITY

(Kinesiology, Health and Athletics Division)

Scope

The program consists of movement-based physical education activity courses.

Credit Toward Associate Degrees

In addition to the two units of physical education activity required for the Associate in Arts or Associate in Science degree, a student may elect additional courses.

Lockers and Towels

Locker room and shower facilities are provided. Students must bring their own towels.

Attire

Students will be expected to change into clothes which allow freedom of movement and are appropriate to the activity. Athletic shoes are required for most classes.

KINA 003A BEGINNING SWIMMING I

1 unit

Basic swimming and safety skills for non-swimmers. Instruction to include orientation to the water, floating and kicking on front and back, arm stroking for front and back, and rhythmic breathing. Safety skills to include treading water, survival float, reaching techniques and pool safety rules. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 003B ADVANCED BEGINNING SWIMMING II

1 unit

Recommended preparation: *KINA 003A or American Red Cross Level III Lifesaving certificate.*

Build on the foundations established in Beginning Swimming I. More emphasis will be placed on stroke development and breathing coordination. Underwater swimming, jumping into the pool, and basic rescue. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 003C INTERMEDIATE SWIMMING

1 unit

Recommended preparation: *KINA 003B or American Red Cross Level IV Lifesaving certificate.*

Strokes included will be elementary backstroke, breaststroke, and sidestroke. Front crawl and back crawl for increased distances. Diving from the side of the pool, turns, and CPR are introduced. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 003D ADVANCED SWIMMING AND DIVING

1 unit

Recommended preparation: *KINA 003C or American Red Cross Level IV Lifesaving certificate.*

All strokes taught in beginning, advanced beginning, and intermediate will be perfected. Diving from the board and the butterfly stroke will be taught. Introductory life guarding and rescue skills will be introduced. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 003E DISTANCE SWIMMING FOR FITNESS

1 unit

Recommended preparation: *KINA 003C or 003D.*

A physical fitness program based on progressive distance swims using the front crawl. **For** students with the ability to swim 500 yards in 12 minutes or less. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 027 ADAPTED FITNESS ACTIVITIES**1 unit**

Prerequisite: *Recommendation by Disabled Students Programs and Services or Student Health Services.*

Emphasis on exercises to increase level of physical, motor and postural fitness through training with weights, stretching exercises and relaxation techniques. **For** students unable to participate in regular physical education activities because of temporary or permanent limitations. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 028A BEGINNING AQUATIC FITNESS ACTIVITIES**1 unit**

Physical fitness activities in the pool. Swimming skill not necessary. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 028B INTERMEDIATE AQUATIC FITNESS ACTIVITIES**1 unit**

Recommended preparation: KINA 028A.

Intermediate physical fitness activities in the pool. Swimming skills not necessary. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 029A BEGINNING STRENGTH TRAINING**1 unit**

Improvement of muscular development and physical fitness through use of resistive exercises; training with barbells and dumbbells. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, P

KINA 029B INTERMEDIATE STRENGTH TRAINING**1 unit**

Improvement of muscular development and physical fitness through the use of weight lifting and physical conditioning exercises. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, P

KINA 029C ADVANCED STRENGTH TRAINING**1 unit**

Improvement of muscular development and physical fitness through use of resistive and isometric exercises and through circuit training. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, P

KINA 030 FITNESS TESTING AND INDEPENDENT EXERCISE**1 unit**

Testing to determine individual fitness level. Goals established and fitness program designed for each individual. Periodic retesting after independent exercise to determine if goals are being met. Total of 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A, P

KINA 032A BEGINNING FITNESS ACTIVITIES**1 unit**

Emphasis on achieving an improved level of physical performance through basic training with weights, circuits, aerobics and stretching programs. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 032B INTERMEDIATE FITNESS ACTIVITIES**1 unit**

Emphasis on improving individual performance in the areas of strength and muscle tone, cardiovascular endurance, flexibility, relaxation and body composition. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 032C ADVANCED FITNESS ACTIVITIES**1 unit**

Improvement in individual fitness levels through advanced activities. Emphasis on a well balanced program of physical activities designed to enhance endurance, flexibility, strength, cardiovascular efficiency, and weight distribution based on a selected exercise program, aerobic work, nutritional information, circuit training, stretching and relaxation. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 033 STRETCHING FITNESS ACTIVITY**1 unit**

Emphasis on achieving and improving level of flexibility through basic stretching exercises. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 034A SELF DEFENSE**1 unit**

Techniques to develop the basic knowledge, attitudes and skills of self defense. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

Grade Mode: L, A, P

KINA 034B INTERMEDIATE SELF-DEFENSE**1 unit**

Intermediate techniques to increase the knowledge, attitudes, body movements and skills used in self-defense. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, P

KINA 036 AEROBIC FITNESS**1 unit**

An introduction to the basic principles and techniques of cardiovascular fitness by using a combination of rhythmic movement and low impact aerobics. Students will also work to improve their muscular strength and tone through the use of calisthenics and/or hand weight circuits. Proper nutrition and a healthy diet for peak performance are emphasized. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 037 POLICE-FIRE AGILITY TRAINING**1 unit**

Instruction and practice in the skills required to complete police and fire departments' physical agility tests. Techniques on how to scale a six foot smooth wall, an eight foot chain link fence, drag a 165 pound dummy from behind the steering wheel of a vehicle; unwind, drag and coil 150 pounds of fire hose. Weight lifting for upper body strength and general physical conditioning. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

KINA 038 CARDIOVASCULAR CONDITIONING**1 unit**

Achievement of physical fitness and efficiency of the cardiovascular system by utilizing aerobic point system, fartlek training, interval training, parcourse, obstacle course and various exercise techniques. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 039A CYCLING FOR FITNESS - OUTDOOR**1 unit**

Basic cardiovascular fitness through cycling: general cycling, fast cycling, sprints, intervals and hill climbing. Cycling safety, bike fit, minor repair instruction and cycling etiquette. Student must provide own bicycle. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 039B BEGINNING CYCLING FOR FITNESS - STATIONARY, INDOOR**1 unit**

Basic cardiovascular fitness is achieved through: general cycling, fast cycling, sprints, intervals and hill climbing. Cycling safety, bike fit, heart rate training. Incorporates a choreographed workout on a specially designed stationary bicycle, using music and fundamental cycling techniques for a beginning rider. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 039C INTERMEDIATE CYCLING FOR FITNESS**1 unit**

Intermediate cardiovascular fitness achieved through: general cycling, fast cycling, sprints, intervals and hill climbing. Cycling safety, bike fit, heart rate training. Incorporates a choreographed workout on a specially designed stationary bicycle, using music and fundamental cycling techniques for an intermediate rider. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 039D ADVANCED CYCLING FOR FITNESS - STATIONARY, INDOOR**1 unit**

Advanced cardiovascular fitness is achieved through: general cycling, fast cycling, sprints, intervals and hill climbing. Cycling safety, bike fit, heart rate training. Incorporates a choreographed workout on a specially designed stationary bicycle, using music and fundamental cycling techniques at an advanced level. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 040A BEGINNING YOGA**1 unit**

Introductory course exploring the principles of hatha yoga. Fundamental skills of the ancient techniques of yoga to enhance wellness and well-being. Development of body alignment, posture, balance, and flexibility through a series of yoga poses and routines. Meditational tools and practices to improve stress reduction and personal growth. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, P

KINA 040B INTERMEDIATE YOGA**1 unit**

Intermediate level hatha yoga course emphasizing intense stretching, balancing, and building of muscular strength. A series of poses and breathing techniques will be practiced in order to create a more strenuous yoga experience. Emphasis will be on principles of healthy living, along with

proper posture, relaxation and meditation techniques. Total of 54 hours laboratory
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, P

KINA 040C ADVANCED YOGA

1 unit

Advanced practice of yoga and meditation. Vigorous vinyasa flow to improve concentration, physical endurance, flexibility, balance and posture. Integration of yoga philosophy and advanced breathing techniques to deepen the mind/body connection and reduce stress. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, P

KINA 046A BEGINNING BADMINTON

1 unit

Instruction in the basic strokes of badminton: clears, drops, smash, around the head clear shot, short and long serves. Rules, strategy, playing terms and etiquette for singles and doubles play. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 046B INTERMEDIATE BADMINTON

1 unit

Review of the basic skills presented in the beginning class: the overhead and underhand clears, the drop, the smash, and short and long serves. Introducing the flick serve, drive serve, the backhand serve, cross court net drops, half smash, the forehand and backhand drives and the round head smash and drop. Emphasis will be placed on conditioning and skill development. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 046C ADVANCED BADMINTON

1 unit

Review previous strokes from beginning and intermediate levels of badminton. The backhand cross court drop, the fast drop, net brush shots and advanced service returns. Emphasis will be on deception in holding shots, execution and placement. Conditioning and on-court drills will be stressed. Court strategy for the game of mixed doubles and advanced strategy for singles and doubles play. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 048A BEGINNING FENCING

1 unit

Basic foil fencing fundamentals and techniques. Conditioning for fencing. Emphasis on beginning bouting, strategy, etiquette, tournament fencing, directing, judging and

scoring. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 048B INTERMEDIATE FENCING

1 unit

Introduction to electric foil. Principles of strength and endurance. Intermediate foil skills: footwork, bladework and body mechanics. Emphasis on intermediate bouting strategy, etiquette, tournament fencing, directing, judging and scoring. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 048C ADVANCED FENCING

1 unit

Advanced foil skills, techniques and conditioning. Introduction to electric epee and sabre. Emphasis on advanced electric and beginning epee bouting strategy, etiquette, tournament fencing, directing, judging and scoring. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINA 050A BEGINNING WEIGHT TRAINING FOR WOMEN

1 unit

Orientation to the basic weight training machines available in gyms/clubs and proper gym etiquette, a study of the basic musculoskeletal anatomy and kinesiology of the female body, present the fundamental tenets of weight training, discussion of how to maintain healthy body composition and information on designing a weight training program to achieve attainable personal goals. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, P

KINA 050B INTERMEDIATE WEIGHT TRAINING FOR WOMEN

1 unit

Study of the musculoskeletal anatomy and kinesiology of the female body, present the fundamental tenets of weight training at an intermediate level, discussion of how to maintain healthy body composition and information on designing a weight training program to achieve attainable personal goals. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, P

KINA 050C ADVANCED WEIGHT TRAINING FOR WOMEN

1 unit

Study of the musculoskeletal anatomy and kinesiology of the female body, present the fundamental tenets of weight training at an advanced level, discussion of how to main-

tain healthy body composition and information on designing a weight training program to achieve attainable personal goals. Total of 54 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, P

KINA 054A BEGINNING TENNIS

1 unit

Development of basic ground strokes: forehand and backhand drives; basic volley and serve; rules and scoring; court etiquette. Total of 54 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, A, P

KINA 054B INTERMEDIATE TENNIS

1 unit

Recommended preparation: KINA 054A.

Development of strokes: forehand and backhand drives, spin serves, overhead strokes; ball, top and back spins; rules; strategy at the intermediate level. Total of 54 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, A, P

KINA 054C ADVANCED TENNIS

1 unit

Recommended preparation: KINA 054B.

Development of strokes; lob, smash, spin; approach to net; advanced game strategy. Total of 54 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, A, P

KINA 065A BEGINNING BASKETBALL

1 unit

Rules; techniques; passing, dribbling, pivoting, footwork and various types of shots; team play and strategy of game. Total of 54 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, A, P

KINA 065B INTERMEDIATE BASKETBALL

1 unit

Recommended preparation: KINA 065A.

Rules; skills and techniques; passing, dribbling and shooting; strategy of team play. Total of 54 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, A, P

KINA 065C ADVANCED BASKETBALL

1 unit

Recommended preparation: KINA 065B.

Rules; skills and techniques; passing, dribbling and shooting; zone, man to man, and pressing defense; high and

low post and motion offense. Total of 54 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, A, P

KINA 069 SOCCER

1 unit

Rules; techniques; passing, dribbling, footwork and various types of shots; team play and strategy of game. Total of 54 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, A, P

KINA 081A BEGINNING VOLLEYBALL

1 unit

Basic techniques, rules and simple strategies. Total of 54 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, A, P

KINA 081B INTERMEDIATE VOLLEYBALL

1 unit

Recommended preparation: KINA 081A.

Review of fundamental skills; strategies and techniques. Total of 54 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, A, P

KINA 081C ADVANCED VOLLEYBALL

1 unit

Recommended preparation: KINA 081B.

Advanced skills: techniques, positions and strategies. High level of competition through tournament play. Total of 54 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, A, P

KINESIOLOGY – INTERCOLLEGIATE ATHLETICS

(Kinesiology, Health and Athletics Division)

Scope

The program consists of intercollegiate activities courses.

Requirements for registration in Intercollegiate Sports

Any student desiring to compete in any intercollegiate sport should enroll in one of the sections of the intercollegiate sport in which he or she intends to participate.

Athletic Eligibility — Men and Women

A student participating in intercollegiate athletic competition must present a certificate from the College physi-

cian stating that he or she is physically fit to participate in the activity for which he or she is a candidate. To be eligible for competition, a student must meet the rules and regulations of the Mission and South Coast Conferences and the Athletic Code of the California Association of Community Colleges. The Athletic Director and the Assistant Dean of Student Affairs maintain copies of the code in their respective offices.

Scope

The program consists of movement-based physical activity courses.

Credit Toward Associate Degrees

In addition to the two units of physical education activity required for the Associate in Arts or Associate in Science degree, a student may elect to take additional courses.

Lockers and Towels

Locker room and shower facilities are available. Students must bring their own towels.

Attire

Students will be expected to attend class in clothes that allow for freedom of movement and are appropriate to the activity. Athletic shoes are required for most classes.

KATH 070 OFF-SEASON CONDITIONING INTERCOLLEGIATE - BADMINTON

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of badminton. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

Grade Mode: L, A, P

KATH 071 OFF-SEASON CONDITIONING INTERCOLLEGIATE - BASEBALL

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of baseball. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

Grade Mode: L, A, P

KATH 072 OFF-SEASON CONDITIONING INTERCOLLEGIATE - BASKETBALL

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student

preparing for and/or interested in being evaluated for the intercollegiate basketball program. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*
Grade Mode: L, A, P

KATH 073 OFF-SEASON CONDITIONING INTERCOLLEGIATE - CROSS COUNTRY

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of cross country. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*

Grade Mode: L, A, P

KATH 074 OFF-SEASON CONDITIONING INTERCOLLEGIATE - FOOTBALL

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of football. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KATH 075 OFF-SEASON CONDITIONING INTERCOLLEGIATE - SOCCER

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of soccer. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KATH 076 OFF-SEASON CONDITIONING INTERCOLLEGIATE - SOFTBALL

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of softball. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KATH 077 OFF-SEASON CONDITIONING INTERCOLLEGIATE - SWIMMING AND DIVING

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for

the intercollegiate sport of swimming. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*
Grade Mode: L, A, P

**KATH 078 OFF-SEASON CONDITIONING
INTERCOLLEGIATE - TRACK AND FIELD**

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of track and field. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*
Grade Mode: L, A, P

**KATH 079 OFF-SEASON CONDITIONING
INTERCOLLEGIATE - VOLLEYBALL**

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of volleyball. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*
Grade Mode: L, A, P

**KATH 080 OFF-SEASON CONDITIONING
INTERCOLLEGIATE - WATER POLO**

1 unit

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of water polo. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*
Grade Mode: L, A, P

**KATH 081 PRE-SEASON INTERCOLLEGIATE ATHLETICS
1 unit**

Enrollment Limitation: *Athletics team candidates.*

Pre-season intercollegiate athletics including sport specific aerobic and anaerobic conditioning, drill technique, strength conditioning, speed development, and game play. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*
Grade Mode: L, P

**KATH 083 INTERCOLLEGIATE SPORTS - BASEBALL
3 units**

Intercollegiate competition for baseball. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 175 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*
Grade Mode: L, A, P

**KATH 084 INTERCOLLEGIATE SPORTS - BASKETBALL
1½ units**

Intercollegiate competition for men's and women's Basketball. **Required** instructional trips. **Maximum credit** 6 units, 1.5 units each semester. Total of 87.5 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*
Grade Mode: L, A, P

**KATH 085 INTERCOLLEGIATE SPORTS - CROSS
COUNTRY**

3 units

Intercollegiate competition for men's and women's cross country. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 175 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*
Grade Mode: L, A, P

**KATH 086 INTERCOLLEGIATE SPORTS - FOOTBALL
3 units**

Intercollegiate competition for Football. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 175 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*
Grade Mode: L, A, P

**KATH 089 INTERCOLLEGIATE SPORTS - SOCCER
3 units**

Intercollegiate competition for men's and women's soccer. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 175 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*
Grade Mode: L, A, P

**KATH 090 INTERCOLLEGIATE SPORTS - SOFTBALL
3 units**

Intercollegiate competition for softball. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 175 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*
Grade Mode: L, A, P

**KATH 091 INTERCOLLEGIATE SPORTS - SWIMMING
3 units**

Intercollegiate competition for men's and women's swimming and diving. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 175 hours laboratory. *Transfer Credit: CSU; UC credit limitations. See counselor.*
Grade Mode: L, A, P

**KATH 093 INTERCOLLEGIATE SPORTS - TRACK
AND FIELD**

3 units

Intercollegiate competition for men's and women's track and field. **Required** instructional trips. **Maximum credit** 12

units, 3 units each semester. Total of 175 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, A, P

KATH 094 INTERCOLLEGIATE SPORTS - VOLLEYBALL
3 units

Intercollegiate competition for volleyball. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 175 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, A, P

KATH 095 INTERCOLLEGIATE SPORTS - WATER POLO
3 units

Intercollegiate competition for water polo. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 175 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, A, P

KATH 096 INTERCOLLEGIATE SPORTS - BADMINTON
3 units

Intercollegiate competition for badminton. **Required** instructional trips. **Maximum credit** 12 units, 3 units each semester. Total of 175 hours laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
Grade Mode: L, A, P

KINESIOLOGY - THEORY

(Kinesiology, Health and Athletics Division)

KINT 002 INTRODUCTION TO ATHLETIC TRAINING

3 units

The history of the athletic training profession, the role of the athletic trainer as part of the sports medicine team, nutrition, emergency management, risk management and injury assessment domains will be introduced. Lab: injury prevention principles and techniques for the application of protective taping/bracing, stretching, therapeutic exercise and testing, and environmental conditions/illnesses. Total 54 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

KINT 003 INTRODUCTION TO KINESIOLOGY
3 units

Introduction to interdisciplinary approach to the study of human movement. An overview of the importance of the sub-disciplines in kinesiology will be discussed along with

career opportunities in the areas of teaching, coaching, allied health, and fitness professions. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: KIN 100*

Grade Mode: L, P

KINT 005 FIRST AID - RESPONDING TO EMERGENCIES
3 units

Theory and detailed demonstration of the first aid care of the injured. The student will learn to assess a victim's condition and incorporate proper treatment. Standard first aid, CPR, and AED certification(s) will be granted upon successful completion of requirements. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: KIN 101*

Grade Mode: L, A, P

KINT 006 AQUATIC CERTIFICATION
4 units

Prerequisites: *Swimming skills equivalent to the ARC Swimmers Certificate, ability to swim 500 yards continuously, and ARC Basic or Emergency Water Safety Certificate or ARC Safety training for swim coaches.*

Theory and practice of swimming strokes, diving, lifesaving, teaching methods and emergency procedures. Preparation for and completion of tests for American Red Cross Lifeguarding, Water Safety Instructor, First Aid, Community CPR, CPR/BLS and Instructor Candidate Training Certificates. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

KINT 014 WELLNESS FOR LIFE
3 units

Emphasis on wellness through the lens of reduced obesity and body fat percentage, nutrition, personal responsibility, healthy lifestyle choices and positive behavioral change. Physical, emotional, psychological, spiritual, social, occupational and environmental influences. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

KINT 020 INDEPENDENT STUDY
1 unit

Prerequisite: *Completion of any KINT course and approval of student project on topics in physical education.*

Student project on topics in physical education; emphasis on research techniques; written reports. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

*Course Identification Numbering System (C-ID)

KINT 027C EARLY CHILDHOOD PHYSICAL EDUCATION
2 units

Creative movement, perceptual motor and rhythmic experiences suitable for preschool children; ideas for equipment; evaluating and individualizing activities, assessing and selecting equipment and creating a safe and active learning environment. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

KINT 031A PROFESSIONAL ACTIVITIES – OFFICIATING

2 units

Rules and advanced techniques of games in season: basketball, football, minor sports. **Fall** semester. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINT 031B PROFESSIONAL ACTIVITIES – OFFICIATING

2 units

Rules and advanced techniques of games in season: baseball, track, minor sports. **Spring** semester. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINT 046A PROFESSIONAL ACTIVITIES – BASEBALL
2 units

Analysis of fundamentals; theory and philosophy of offensive and defensive strategy. Principles of practice and score keeping in baseball. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINT 046B PROFESSIONAL ACTIVITIES – BASEBALL
2 units

Prerequisite: KINT 046A.

Analysis of advanced theory and teaching of offensive and defensive strategy. Principles of practice and score keeping in baseball. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINT 048 PROFESSIONAL ACTIVITIES – PHYSICAL FITNESS

2 units

Implementation of basic concepts of physical fitness. A wide variety of conditioning programs and techniques utilized in designing individual fitness programs. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINT 051 PROFESSIONAL ACTIVITIES – TRACK AND FIELD

2 units

Basic and advanced skills, rules and strategy in track and field events. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINT 052A PROFESSIONAL ACTIVITIES – BASKETBALL

2 units

Analysis of the fundamental skills of men's and women's basketball. Offensive and defensive strategy. Principles of scoring. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINT 052B PROFESSIONAL ACTIVITIES – BASKETBALL

2 units

Prerequisite: KINT 052A.

Analysis of advanced skills of men's and women's basketball. Offensive and defensive strategy. Principles of scoring. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINT 053A PROFESSIONAL ACTIVITIES – FOOTBALL
2 units

Analysis of basic football fundamentals, theory and philosophy of offensive and defensive strategy, principles of the kicking game. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINT 053B PROFESSIONAL ACTIVITIES – FOOTBALL
2 units

Prerequisite: KINT 053A.

Analysis of advanced football fundamentals, theory and philosophy of offensive and defensive strategy, principles of the kicking game. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

KINT 054 PROFESSIONAL ACTIVITIES – VOLLEYBALL

2 units

Analysis of basic and advanced volleyball fundamentals, theory and philosophy of offensive and defensive strategy. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

KINT 055A PROFESSIONAL ACTIVITIES – SOCCER**2 units**

Analysis of soccer fundamentals; theory and teaching of offensive and defensive strategy. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

KINT 055B PROFESSIONAL ACTIVITIES – SOCCER**2 units**

Prerequisite: KINT 055A.

Analysis of advanced soccer fundamentals; theory and teaching of offensive and defensive strategies. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

KINT 056A PROFESSIONAL ACTIVITIES – SOFTBALL**2 units**

Analysis of softball fundamentals, theory, philosophy, and teaching these activities. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

KINT 056B PROFESSIONAL ACTIVITIES – SOFTBALL**2 units**

Prerequisite: KINT 056A.

Analysis of advanced softball, theory, philosophy, and teaching these activities. Total of 36 hours lecture and 18 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

KINT 061 THEORY OF COACHING**3 units**

Designed for coaches at varying levels from youth league to high school varsity. Focuses on coaching issues and problems and includes the philosophy, theory, and principles of developing and maintaining an athletic program. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

KINT 097 THEORY AND DEVELOPMENT OF FITNESS AND WELLNESS**3 units**

Mastering core skills in health and wellness, fitness, kinesiology of physical activity, goal setting, decision making, leadership, time management, achievement skills, education, attitudes and habits, and cognitive style preferences. Total of 54 hours lecture and 18 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A, P

KINT 101 PHYSICAL FITNESS ASSESSMENTS**1 unit**

Development of exercise prescriptions and nutrition plans to maintain or improve physical fitness level. Application of Physical Fitness Assessments on body composition, flexibility, muscular strength, and endurance. Total of 18 hours lecture and 18 hours laboratory.

Grade Mode: L, P

KINT 180 INTRODUCTION TO TEACHING YOGA**3 units**

Teaching techniques of yoga. Emphasis on variations, adjustments and modifications of basic yoga poses for teaching different levels in various settings. Focus on developing skill for instructing yoga, including verbal cueing anatomically supportive sequences, and stress management techniques for healthier lifestyles. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L,P

KINT 181 PHILOSOPHY OF YOGA**3 units**

Introduction to the philosophy of yoga through history, development of the asanas, and traditional texts. Major lineages of yoga and related practices will be covered, with a focus on the integration of these ideas in contemporary teaching. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, P

KINT 182 ANATOMICAL PRINCIPLES OF KINESIOLOGY AND FITNESS**3 units**

Designed to introduce the student to the basic principles of kinesiology and functional anatomy as they relate to core principles of fitness. Study of anatomical structures of body movements and teaching techniques for those aspiring to explore career opportunities in Yoga and/or Fitness. Total of 54 hours lecture.

Grade Mode: L,P

LATIN

(Languages Division)

LATN 001 ELEMENTARY LATIN**5 units**

Basic vocabulary and grammatical forms for reading simple Latin prose. Introduction of linguistic foundation for further study of European languages; brief survey of philosophy and life of ancient Rome. Corresponds to first year of high school Latin. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

LATN 002 ELEMENTARY LATIN

5 units

Prerequisite: *LATN 001 or the first year of high school Latin or satisfactory score on placement test.*

Intensive study of vocabulary, grammar and syntax. Translation from English into Latin; reading from Roman authors. Customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

LIBRARY

LIB 001 COLLEGE RESEARCH SKILLS

1 unit

Development of effective research skills using library resources and other research tools. Focus on research planning, search strategies, critical evaluation of information, and documentation of sources following standard citation styles. Total of 18 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, P

LIB 020 INDEPENDENT STUDY

1 unit

Prerequisites: *Completion of LIB 001 and approval of student project.*

Individual research projects on library-related topics. Regular periodic faculty conferences and written report are required. Total of 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A, P

LIB 101 INTRODUCTION TO LIBRARY SERVICES FOR PARAPROFESSIONALS

3 units

Recommended Preparation: *LIB 001 and BIT 106 or experience with standard office software.*

Characteristics of the main types of libraries with a focus on tools and terminology of library services and the role of library support staff in library operations. Library principles, service philosophy, and issues related to library services are also covered. For students interested in working in library support staff roles, but open to all students. Total of 54 hours lecture.

Grade Mode: L

LIB 102 INTRODUCTION TO REFERENCE SERVICES

3 units

Prerequisite: *Enrollment in or completion of LIB 001.*

Recommended Preparation: *LIB 101.*

Basic tools, techniques and philosophy of library reference services with a focus on reference interview skills and effective search techniques for assisting library users

with basic reference and research inquiries. Social and ethical issues related to reference services policies and patron privacy are also covered. For students interested in working in library support staff roles, but open to all students. Total of 54 hours lecture.

Grade Mode: L, A

LIB 103 INTRODUCTION TO LIBRARY ACCESS SERVICES

3 units

Library circulation and access services with a focus on customer service, online circulation systems, and the organization and maintenance of library collections. Issues related to access services policies and patron privacy are also covered. **For** students interested in working in library support staff roles, but open to all students. Total of 54 hours lecture.

Grade Mode: L

LIB 104 INTRODUCTION TO LIBRARY TECHNICAL SERVICES

3 units

Recommended Preparation: *LIB 101.*

Fundamentals of library technical services with a focus on the tools and skills needed for library acquisitions and processing library materials. Issues related to collection development policies and access to library materials are also covered. **For** students interested in working in library support staff roles, but open to all students. Total of 54 hours lecture.

LIB 105A DESCRIPTIVE CATALOGING PROCEDURES IN ONLINE ENVIRONMENTS

3 units

Prerequisite: *LIB 104.*

Study of the basic principles of descriptive cataloging, Machine Readable Cataloging (MARC) formats, introduction to bibliographic control, and authority control. Emphasis on online copy cataloging using national standards for cataloging. Focus on the OCLC system and local cataloging modules. Introduction to basic principles of classification and subject headings. Total of 54 hours lecture.

Grade Mode: L

LIB 106 LIBRARY TECHNOLOGY INTERNSHIP

1 unit

Prerequisites: *LIB 101 and 104.*

Enrollment Limitation: *Instructor approval.*

Supervised on-the-job experience in an approved library setting information. **Pass/no pass** grading. Requires 60 hours of non-paid work or 75 hours of paid work for one semester unit. Total of 60 hours work experience.

Grade Mode: A, P

LIB 120 INTRODUCTION TO ARCHIVES & SPECIAL COLLECTIONS

3 units

Recommended Preparation: *LIB 101*.

Basic archival principles and practices including: handling, storing, describing, organizing, and preserving documents and data. Use of Describing Archival Collections (DACs) for discovery of archival collections. Survey of current online systems for managing archival materials. **For** students interested in working in archives or special collections. Total of 54 hours lecture.

Grade Mode: L

LIB 121 TECHNOLOGIES & PROCESSES FOR DIGITAL COLLECTIONS

3 units

Recommended Preparation: *BIT 025*.

Basic processes of digital repositories including assessing collection materials, scanning, managing files for preservation, quality control and the use of digital asset management systems. **For** students interested in working in digital preservation projects. Total of 54 hours lecture.

Grade Mode: L, P

LIB 122 INTRODUCTION TO METADATA FOR DIGITAL OBJECTS

3 units

Prerequisites: *LIB 121*.

Recommended Preparation: *LIB 105A*.

Basic principles of metadata development for digital repositories. Survey of common metadata schemas and controlled vocabularies. Emphasis on use of Dublin Core schema to create shareable metadata records for application across a collection of digital objects. **For** students interested in working in digital preservation projects. Total of 54 hours lecture.

Grade Mode: L, P

LIB 123 INTRODUCTION TO COPYRIGHT ISSUES FOR DIGITAL COLLECTIONS

1 unit

Prerequisites: *LIB 121*.

Introduction to copyright and privacy issues relating to digital projects. Includes an overview of public domain, fair-use, licensing, copyright status as selection criteria, and rights metadata. Total of 18 hours lecture.

Grade Mode: L, A, P

LIB 124 SURVEY OF DIGITAL PRESERVATION

2 units

Prerequisites: *Enrollment in or completion of LIB 121 and LIB 122, or equivalent skills as demonstrated through placement based on the Library Technology Assessment process.*

Examination of core components and functions of a digital preservation program. Topics include digital preserva-

tion strategies, tools, and policies that work effectively for a variety of data types and cultural heritage organizations. **For** students interested in working in the digital preservation program, but open to all students. Total of 36 hours of lecture.

Grade Mode: L

LIB 126 ARCHIVES & DIGITAL COLLECTIONS INTERNSHIP

1 unit

Prerequisite: *LIB 120, 121 and 122*.

Corequisite: *LIB 124*

Supervised practical experience working in an approved archives, specialized collection or digital project in a library, museum, or other type of organization. **Pass/no pass** grading. Requires 60 hours of non-paid work or 75 hours of paid work for one semester unit.

Grade Mode: A, P

LINGUISTICS

(Languages Division)

LING 010 INTRODUCTION TO LINGUISTICS

3 units

Interdisciplinary course: English, Languages

Recommended Preparation: *Eligibility for ENGL 001A*.

Survey of sounds, structure and development of language in connection with its social and cultural function. Differences and relationships among languages. Recommended for English and foreign language majors, but open to all qualified students. **No credit** if taken after ENGL 010. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

LING 011 HISTORY OF ENGLISH LANGUAGE

3 units

Interdisciplinary course: English, Languages

Recommended Preparation: *Eligibility for ENGL 001A*.

Origins and development of the English language, from its Germanic ancestors to present-day American English. **No credit** if taken after ENGL 011. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

LING 012 INTERCULTURAL COMMUNICATION

3 units

Interdisciplinary course: English, Languages

Recommended Preparation: *Eligibility for ENGL 001A*.

Linguistic and cultural patterns; how and what people communicate. Designed to aid both Americans and foreign students in the development of intercultural understand-

ing and communication skills. **No credit** if taken after ENGL 012. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: COMM 150*

Grade Mode: L, A, P

LING 014 LANGUAGE IN SOCIETY

3 units

Recommended preparation: *Eligibility for ENGL 001A.*

Language in culture and society. Focus on the role of language in power, ethnic, gender, generational, and ideological relationships. Analyses of regional differences, language change and loss, and multilingualism. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

LING 016 PSYCHOLINGUISTICS: LANGUAGE AND THE MIND

3 units

Recommended Preparation: *Eligibility for ENGL 001A.*

Mental processes in production and comprehension of language. First and second language acquisition. Language breakdown due to neurological disease. **Recommended** for Psychology, English, Linguistics, and Foreign Language majors but open to all qualified students. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

LING 017 LANGUAGE ACQUISITION

3 units

Recommended Preparation: *Eligibility for ENGL 001A.*

Introduces students to first language acquisition, including the early perception and production of speech sounds, early word acquisition, the development of rules for sentence production and comprehension, and the acquisition of communicative skills. Topics include children with bilingual children and atypical language development. Total of 54 hours of lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

LING 020 INDEPENDENT STUDY

1 unit

Individual linguistics projects, such as portfolios, written reports, and research papers. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

MACHINE SHOP

(Business and Engineering Technology Division)

MACH 101 BEGINNING METALWORKING SKILLS

3 units

Beginning machine shop course focusing on operation, inspection, safety, and developing process plans for optimal metal removal. Introductory mill and lathe operations with layout work. Student lab fee may be applicable towards necessary materials. Total 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

MACH 102 INTERMEDIATE METALWORKING

3 units

Prerequisite: *MACH 101.*

Intermediate machine shop course focusing on operation, inspection, safety, and developing process plans for optimal metal removal. Intermediate mill and lathe operations with basic Computer Numerical Control and Computer-Aided Manufacturing. Total 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

MANUFACTURING AND INDUSTRIAL TECHNOLOGY

(Business and Engineering Technology Division)

MIT 101 INTRODUCTION TO ROBOTICS

4 units

Introduction to the field of manufacturing and industrial technologies. Production of a complete electro-mechanical solution using industrial fabrication, Computer-Aided Design, electronics and programming to achieve an autonomous solution for career exploration. Total 27 hours lecture and 144 hours laboratory.

Grade Mode: L, P

MIT 131 PROFESSIONAL SKILLS FOR CAREER SUCCESS

3 units

Navigating technology at work; creativity and innovation; interpersonal communications; time management; organization skills; effective listening; valuing diversity; and value-added service. Includes role playing and critical thinking activities to teach these valuable skills in an integrated manner. Total of 54 hours lecture.

Grade Mode: L, A, P

MARKETING

(Business and Engineering Technology Division)

MRKT 020 PRINCIPLES OF MARKETING

3 units

Introductory course in marketing with the prime objective of understanding the marketing philosophy and how to improve an organization's performance through strategic marketing activities. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L

MRKT 123 PROMOTIONS AND MARKETING COMMUNICATIONS

3 units

Principles and practices of promotions and marketing communications used by marketers to inform and persuade consumers. Introduction to the field of promotions and its role in the marketing mix. Total of 54 hours lecture.

Grade Mode: L

MRKT 128 MARKETING FIELD PRACTICE

3 units

Prerequisites: Maintain enrollment in 7 units or more including field practice and one or more course in a Business Management curriculum.

Supervised work experience in any firm engaged in the distribution of goods and/or services. Minimum of 15 hours of related work. Total of 270 hours field practice.

Grade Mode: L, A, P

MRKT 132 RETAIL MANAGEMENT

3 units

Principles and practices in the management and merchandising of retail stores. Includes critical buying function, merchandising, promotional techniques, site selection, layout, staffing, market positioning and customer service. Total of 54 hours of lecture.

Grade Mode: L, A

MRKT 150 SOCIAL MEDIA MARKETING FOR BUSINESS

3 units

Foundation of what social media is and how it can be used to grow a business. Focus on developing a social media strategy and how to leverage social media platforms to promote a brand and/or business to prospective customers. Total of 54 hours lecture.

Grade Mode: L

MATHEMATICS

(Mathematics Division)

A student taking his/her first mathematics course at Pasadena City College must meet the course prerequisites. Once

placed in the proper mathematics course, students advance in the sequence according to PCC class prerequisites. Initial math course placement is based on multiple measures of students' readiness, including a placement exam, and the level, age and quality of their prior mathematics academic experience. If more than one year has elapsed since a student qualified for a course, it is recommended that the student see a counselor before enrolling into a math course.

MATH 003 COLLEGE ALGEBRA FOR STEM

5 units

Prerequisite: MATH 131 or placement based on the Math assessment process.

Algebra, graphing, and applications of functions; polynomial, rational, logarithmic and exponential functions, equations and inequalities; linear and nonlinear systems of equations; conic sections; sequences and series; the binomial theorem. **Intended** for STEM majors but open to all qualified students. Total of 90 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

MATH 005A SINGLE VARIABLE CALCULUS I

5 units

Prerequisites: MATH 007B or MATH 008 or MATH 009 or placement based on the Math assessment process.

Limits, differentiation, and integration of functions of a single variable including the Mean Value Theorem and the Fundamental Theorem of Calculus. **No credit** if taken after MATH 005AH. Total of 90 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: MATH 211; MATH SEQ 900S (WITH MATH 005B)*

Grade Mode: L, P

MATH 005AH HONORS SINGLE VARIABLE CALCULUS I

5 units

Prerequisite: MATH 007B or 008 or 009, or placement based on the Math assessment process.

Enrollment Limitations: Acceptance to the Honors Program

Limits, differentiation, and integration of functions of a single variable including the Mean Value Theorem and the Fundamental Theorem of Calculus. As an honors course, students will be expected to complete additional assignments involving more extensive proofs and problem solving to gain deeper insight into single variable calculus theory and applications. **No credit** if taken after Math 005A. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID 211; MATH SEQ 900S (WITH MATH 005BH)*

Grade Mode: L, P

MATH 005B SINGLE VARIABLE CALCULUS II

5 units

Prerequisite: MATH 005A or MATH 005AH or placement based on the Math assessment process.

Differentiation and integration of trigonometric, exponential, logarithmic, hyperbolic functions, polar, and parametric equations; applications and techniques of integration; indeterminate forms and infinite sequences and series. **No credit** given if taken after MATH 005BH. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: MATH 221; MATH SEQ 900S (WITH MATH 005A)*

Grade Mode: L, P

MATH 005BH HONORS SINGLE VARIABLE CALCULUS II **5 units**

Prerequisite: MATH 005A or MATH 005AH or placement based on the Math assessment process.

Enrollment Limitation: Acceptance to the PCC Honors Program.

Differentiation and integration of trigonometric, exponential, logarithmic, hyperbolic functions; polar, and parametric equations; applications and techniques of integration; indeterminate forms and infinite sequences and series. As an honors course, students will be expected to complete additional assignments involving more extensive proofs and problem solving to gain deeper insight of single variable calculus theory and applications. **No credit** if taken after MATH 005B. Total of 90 hours lecture.

*Transfer Credit: CSU, UC. *C-ID: MATH 221; MATH SEQ 900S (WITH MATH 005BH)*

Grade Mode: L, P

MATH 005C MULTIVARIABLE CALCULUS **5 units**

Prerequisite: MATH 005B or MATH 005BH or placement based on the Math assessment process.

Parametric equations, polar coordinates, vectors and vector calculus, partial differentiation, multiple integration, Green's theorem, divergence theorem of Gauss, Stokes' theorem. **No credit** given if taken after MATH 005CH. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: MATH 230*

Grade Mode: L, P

MATH 005CH HONORS MULTIVARIABLE CALCULUS **5 units**

Prerequisite: MATH 005B or 005BH or placement based on the Math assessment process.

Parametric equations, polar coordinates, vectors and vector calculus, partial differentiation, multiple integration, Green's theorem, divergence theorem of Gauss, Stokes' theorem. As an honors course, students will be expected to complete additional assignments involving more extensive proofs and problem solving to gain deeper insight of multivariable calculus theory and applications. **No credit** if taken after Math 005C. Total of 90 hours lecture

Transfer Credit: CSU; UC

Grade Mode: L, P

MATH 007A MATHEMATICAL ANALYSIS 1

4 units

Prerequisite: MATH 131 or MATH 133B or MATH 134B, and MATH 139; or placement based on the assessment process.

Algebraic, exponential, logarithmic and trigonometric functions; inverses of functions; equations and inequalities involving transcendental functions; zeros of polynomials; graphing techniques; angle measure; mathematical modeling. **For** mathematics and science majors, but open to all qualified students. **No credit** if taken after MATH 009. Total of 90 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

MATH 007B MATHEMATICAL ANALYSIS 2

4 units

Prerequisite: MATH 007A.

Trigonometric Identities and Equations, Solutions of Triangles, Polar Coordinates, Conic Sections, Parametric Equations, Sequences and Series, Mathematical induction, solutions to linear and non-linear systems, vectors and their applications. **For** mathematics and science majors, but open to all qualified students. Total of 90 hours lecture. **No credit** if taken after MATH 009.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

MATH 008 PRECALCULUS TRIGONOMETRY

4 units

Prerequisite: MATH 003 or placement based on the assessment process.

Trigonometric functions and their graphs; inverse trigonometric functions; unit circle and special right triangles; trigonometric identities and equations; polar and parametric equations; polar and rectangular forms of complex numbers and vectors; matrix algebra and Cramer's Rule; mathematical induction. Intended for STEM majors but open to all qualified students. **No credit** if taken after MATH 007B. Total of 72 hours lecture.

*Transfer Credit: CSU. *C-ID: MATH 851*

Grade Mode: L, A, P

MATH 009 PRECALCULUS MATHEMATICS

5 units

Prerequisite: MATH 008 or placement based on Math assessment process.

Algebraic, exponential, logarithmic and trigonometric functions; inverse functions; zeros and graphs of functions; inequalities; matrices; determinants; sequences and series; binomial theorem; mathematical induction; permutations, combinations and probability; topics in analytic geometry including curve sketching and conic sections. **No credit** if taken after MATH 007A or 007B. Total of 90 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

*Course Identification Numbering System (C-ID)

MATH 010 LINEAR ALGEBRA AND APPLICATIONS**5 units****Prerequisite:** MATH 005B.

Vector spaces, linear transformations, determinants, solutions of systems of equations, algebra of matrices. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: MATH 250***Grade Mode:** L, A, P**MATH 015 EXPLORATIONS IN QUANTITATIVE REASONING****4 units****Prerequisite:** MATH 131 or 150 or placement on the Math placement process.

Skills and techniques for problem solving using mathematical methods and quantitative reasoning. Topics include: elementary logic; combinatorics and probability; statistics; set theory; and finance math. **For** students with non-STEM majors. Total of 72 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**MATH 020 INDEPENDENT STUDY****2 units****Prerequisite:** Enrollment in or completion of any college level math course; and permission of division dean.

Faculty-guided survey of contemporary mathematical topics and student research. Total of 108 hours laboratory.

*Transfer Credit: CSU; UC credit limitations. See counselor.***Grade Mode:** L, A, P**MATH 022 DISCRETE MATHEMATICS****4 units****Prerequisite:** MATH 003 or MATH 007A or CS 002 or placement based on the Math assessment process.

Study of finite mathematical systems. Includes set theory logic, combinatorics, relations and functions, matrix algebra, Boolean algebra, recursion, graph theory. **For** mathematics and computer science majors, but open to all qualified students. Total of 90 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**MATH 038 FOUNDATIONS OF ELEMENTARY SCHOOL MATHEMATICS: BASIC NUMBER CONCEPTS****3.5 units****Prerequisite(s):** MATH 131 or placement based on the Math assessment process.

Introduces problem-solving strategies and quantitative reasoning to develop skills and explore topics in numeration systems and the real number system. Designed for prospective elementary and middle school teachers.

Total of 54 hours lecture and 18 hours laboratory.

*Transfer Credit: CSU; UC***Grade Mode:** L, P**MATH 055 DIFFERENTIAL EQUATIONS****5 units****Prerequisites:** MATH 005C and MATH 010.

Ordinary differential equations with emphasis on the linear equation and its applications in engineering and physics, series solutions, Laplace transforms, Fourier series and their application in partial differential equations. **No credit** if taken after MATH 055H. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: MATH 240***Grade Mode:** L, A, P**MATH 055H HONORS DIFFERENTIAL EQUATIONS****5 units****Prerequisites:** MATH 005C and MATH 010.

Ordinary and partial differential equations, nonlinear differential equations, systems of differential equations, series solutions, Laplace transforms, numerical solutions, Fourier series, functional and harmonic analysis, Sturm-Liouville theory, chaotic dynamical systems, and an introduction to Hilbert spaces; taught with the rigor, breadth and depth expected of an honors course. **For** students going into research in mathematics, physics, astronomy, chemistry, geology and other pure and applied sciences, but open to all qualified students. **No credit** if taken after MATH 055. Total of 90 hours lecture.

*Transfer Credit: CSU; UC credit limitations. See counselor.***Grade Mode:** L, A, P**MATH 103 SUPPORT FOR COLLEGE ALGEBRA****½ units****Corequisite:** MATH 003.

Review of core prerequisite skills, competencies, and concepts for college algebra with an emphasis on critical thinking and problem solving. **Intended** for students who are concurrently enrolled in Math 003: College Algebra for STEM. Topics include learning strategies and mathematical knowledge necessary for successful completion of College Algebra for STEM. Total of 45 hours laboratory.

Grade Mode: P**MATH 115 SUPPORT FOR EXPLORATIONS IN QUANTITATIVE REASONING****½ unit****Corequisite:** MATH 015.

Review of core prerequisite skills, competencies, and concepts for quantitative reasoning with an emphasis on critical thinking and problem solving. **Intended** for students who are concurrently enrolled in MATH 015: Explorations in Quantitative Reasoning. Topics include learning strategies and mathematical knowledge necessary for successful completion of Explorations in Quantitative Reasoning. Total of 36 hours laboratory.

Grade Mode: P

*Course Identification Numbering System (C-ID)

MATH 125 BEGINNING ALGEBRA**4 units****Prerequisite:** *MATH 402 or 400B or 250, or placement based on the Math assessment process.*

Simplifying linear, polynomial, rational, and radical expressions. Using properties of exponents. Factoring polynomials. Applications and solving of linear, rational, radical, and quadratic equations. Graphing linear equations and solving systems of linear equations. **Maximum credit** for MATH 125, 127AB, and 128AB is 4 units. **No credit** if taken after MATH 127B or MATH 128B. Total of 90 hours lecture.

Grade Mode: L, A, P**MATH 131 INTERMEDIATE ALGEBRA FOR STEM****5 1/2 units****Prerequisite:** *MATH 125; or MATH 250 and concurrent enrollment in or completion of MATH 331; or placement based on the Math assessment process.*

Topics include algebra, graphing, and applications of functions: polynomial, rational, radical, exponential, and logarithmic. Designed for STEM majors and some Business majors. Total of 90 hours lecture and 45 hours laboratory.

Grade Mode: L, P**MATH 139 PLANE GEOMETRY****3 units****Prerequisite:** *MATH 125 or MATH 126C or MATH 127B or MATH 128B.*

Geometric facts necessary for advanced work in mathematics. Deductive process emphasized. Total of 90 hours lecture.

Grade Mode: L, A, P**MATH 141 SURVEY OF MATHEMATICAL IDEAS****4 units****Prerequisite:** *MATH 125 or MATH 127B or MATH 128B or placement based on the Math assessment process.*

Study of practical applications of mathematics, including topics in finance, probability and statistics, and geometry. Additional topics may include graph theory, health and nutrition, voting, history of mathematics, and logic. Total of 90 hours lecture.

Grade Mode: L, A, P**MATH 150 QUANTITATIVE LITERACY II****5.5 units****Prerequisite:** *MATH 250 or MATH 402 or MATH 400B or MATH 127B or placement based on the Math assessment process.*

Study of practical applications of mathematics including finance, probability, statistics, geometry, measurement & dimensional analysis, and functions: linear, exponential & logarithmic. **For** non-STEM majors, but open to all qualified students. Total of 90 hours lecture and 45 hours of laboratory.

Grade Mode: L, A, P**MATH 171A EXPLORING TOPICS IN MATHEMATICS****3 units****Exploratory course:** *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest.

Pass/no pass grading. Total of 90 hours lecture.**Grade Mode:** A, P**MATH 171B EXPLORING TOPICS IN MATHEMATICS****2 units****Exploratory course:** *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest.

Pass/no pass grading. Total of 45 hours of lecture.**Grade Mode:** A, P**MATH 171C EXPLORING TOPICS IN MATHEMATICS****1 unit****Exploratory course:** *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest.

Pass/no pass grading. Total of 18 hours lecture and 18 hours laboratory.**Grade Mode:** A, P**MATH 250 QUANTITATIVE LITERACY I****5.5 units****Prerequisite:** *MATH 450 or placement based on the Math assessment process.*

Number sense and basic algebraic skills involving integers, fractions, decimals, and percents. Simplifying algebraic expressions, solving linear equations and graphing. With an emphasis on how and where mathematics is used. **No credit** if taken after Math 402, 400B, 125, 127B, or 128B. Total of 90 hours lecture and 45 hours laboratory.

Grade Mode: L, A, P**MATH 330 SKILLS FOR COLLEGE SUCCESS IN ELEMENTARY ALGEBRA****2 units****Corequisite:** *MATH 125.*

Development and rigorous practice of essential study techniques and course material for success in Elementary Algebra. Integration of web-based supplemental instruction, life management skills, strategies for successful classroom experience, and critical thinking/problem solving strategies. **No credit** if taken after MATH 110. **For** students admitted to the Math Path program but open to all qualified students. **Pass/no pass** grading. Total of 45 hours of lecture.

Grade Mode: A, P

MATH 331 SKILLS FOR COLLEGE SUCCESS IN INTERMEDIATE ALGEBRA

$\frac{1}{2}$ unit

Prerequisite: MATH 250 or placement based on the Math assessment process

Corequisite: MATH 131.

Critical thinking and problem solving. Intended for STEM majors to develop study skills and mathematical knowledge necessary for successful completion of Intermediate Algebra for STEM. Total of 45 hours of laboratory.

Grade Mode: P

MATH 402 PREALGEBRA

4 units

Prerequisite: MATH 450, or placement based on the Math assessment process.

Basic algebraic skills involving fundamental mathematical operations with integers, fractions, decimals, and percents. Simplifying algebraic expressions and solving equations. **Maximum credit** for MATH 402 and 400AB is 4 units. **No credit** if taken after MATH 400B or 250. Total of 90 hours lecture.

Grade Mode: L, A, P

MATH 429 SKILLS FOR SUCCESS IN PREALGEBRA

2 units

Corequisite: MATH 402.

Development and rigorous practice of essential study techniques and course material for success in Prealgebra; web-based supplemental instruction; life management skills; strategies for successful classroom experience, and critical thinking/problem solving strategies. **No credit** if taken after MATH 110. **Pass/no pass** grading. Total of 45 hours lecture.

Grade Mode: A, P

MATH 450 NUMERICAL FOUNDATIONS

4 units

Building whole number arithmetic skills. Includes a brief introduction to fractions, decimals and percents and incorporates study skills for success in mathematics courses. Total of 90 hours lecture.

Grade Mode: L, A, P

MEDICAL ASSISTING

(Health Sciences Division)

MA 109 HEALTH INFORMATION TECHNOLOGY

1 unit

Enrollment Limitation: Acceptance into the Medical Assisting Program.

Practical use of Electronic Health Records (EHRs) in actual medical settings, which cover the cycle of health care

delivery in a physician's office including front office, back office, and medical billing/coding. Real-life scenarios will be given to practice the creation of electronic charting. Total of 9 hours lecture and 27 hours laboratory.

Grade Mode: L

MA 110 MEDICAL OFFICE MICROCOMPUTER MANAGEMENT APPLICATIONS

1 unit

Enrollment Limitation: Acceptance into Medical Assisting Program.

Introduction to concepts and skills needed in the medical office through spreadsheets, accounts receivable, insurance entry, patient demographic entry, and scheduling systems through hands-on computer simulations. Total of 9 hours lecture and 27 hours laboratory.

Grade Mode: L

MA 111A MEDICAL OFFICE PROCEDURES I

4 units

Enrollment Limitation: Acceptance into Medical Assisting Program.

Basic office procedures for medical assistants. Topics include: patient reception, human relations, therapeutic communication, appointment scheduling, accuracy and maintenance of patient records, telephone techniques, computer data entry, initial processing of managed care patients, legal implications, and ethical considerations. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L

MA 111B MEDICAL OFFICE PROCEDURES II

4 units

Prerequisite: MA 111A.

Patient processing. Medical records maintenance. Written and oral communication. Patient instruction. Processing mail. Banking. Financial procedures including professional fees, billing, and collections. Meeting arrangements and travel itinerary. Marketing. Legal implications of medical practice. Total of 54 hours lecture and 54 hours laboratory.

Grade Mode: L, A

MA 113 HUMAN DISEASE

3 units

Prerequisite: MA 115.

Pathophysiology of body systems; integration of disease processes of organ systems with medical and nursing assessment and procedures; diagnostic tests; invasive procedures; medications; nutritional intervention and expected outcomes. Use of drug reference books. Total of 54 hours lecture.

Grade Mode: L, A

MA 115 MEDICAL TERMINOLOGY**3 units**

Physiological and anatomical terms referring to human tissues and organic systems; medical abbreviations; introduction to medical records and prescription writing; use of medical dictionaries. **Recommended** PYSO 100. Total of 54 hours lecture.

Grade Mode: L, A**MA 120 INDEPENDENT STUDY****1 unit****Prerequisite:** MA 122A.

Research or clinical project including experience in clinical practice settings, practical laboratory assignment, lecture attendance, literature review and community projects. Total of 54 hours laboratory.

Grade Mode: L, A**MA 122A CLINICAL ASSISTING TECHNIQUES I****2 units****Prerequisites:** Enrollment in or completion of all of the following: MA 111A, MA 115, PYSO 100.

Occupational Safety and Health Act regulations; medical asepsis and infection control; vital signs and height/weight measurements; initial medical record documentation; maintenance of the clinical facility; specimen processing. Total of 27 hours lecture and 36 hours laboratory.

Grade Mode: L, A**MA 122B CLINICAL ASSISTING TECHNIQUES II****2 units****Prerequisite:** MA 122A.

Patient history and interviewing; techniques of assisting the physician with patients; sterilization techniques; minor surgeries and sterile dressing change; staple and suture removal; theory of x-ray examination and treatment. Total of 27 hours lecture and 36 hours laboratory.

Grade Mode: L, A**MA 122C CLINICAL ASSISTING TECHNIQUES III****4 units****Prerequisite:** MA 122B and enrollment in or completion of MA 124.

Administration of medication and pharmacology. Patient education. Techniques of assisting in a medical specialist's office. Electrocardiographic methods. Bandaging and first aid. Nutrition and diet modification. Theory of physical therapy. Total of 54 hours lecture and 72 hours laboratory.

Grade Mode: L, A**MA 124 MEDICAL OFFICE LABORATORY PROCEDURES****3 units****Prerequisites:** MA 122B and PYSO 100.**Corequisite:** MA 122C.

Methods of specimen collection. Principles of assisting the physician with routine office laboratory tests. Techniques for blood tests and urinalysis. Microbiology pertaining to medical office procedures. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A**MA 126 PHARMACOLOGY FOR MEDICAL ASSISTANTS****2 units****Prerequisites:** MA 115 and enrollment in medical assisting program.

Introduction to the principles of pharmacology and medication administration in the ambulatory setting. Reading, interpreting and documenting medication orders. Calculating dosages for nonparenteral and parenteral medications used in the ambulatory setting. Common medications used in each body system. Total of 27 hours lecture and 27 hours laboratory.

Grade Mode: L, A**MA 127 MEDICAL INSURANCE****3 units****Prerequisites:** MA 110 and 115.

Types of health insurance and billing procedures. Procedure codings. International Classification of Diseases — Clinical Modifications. Total of 54 hours lecture.

Grade Mode: L, A**MA 128 CLINICAL EXPERIENCE****4 units****Prerequisites:** All the following: MA 122, 124, 127.

Supervised clinical experience in a medical office or clinic. Analysis of medical assisting clinical experience. Applied psychology in the medical office or clinic. Total of 18 hours lecture and 162 hours laboratory.

Grade Mode: L, A**MICROBIOLOGY****(Natural Sciences Division)****MICR 002 MICROBIOLOGY****4 units****Prerequisite:** CHEM 002A or CHEM 022 or CHEM 001A, or placement based on the biochemistry placement process.**Recommended preparation:** BIOL 003 or 011.

Structure and function of bacteria, viruses, fungi, protozoa and algae. Elements of microbial physiology, genetics, control and nutrition; epidemiology; immunology and allergy. Survey of microbial infections. Aseptic techniques. Total of 54 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC**Grade Mode:** L, P

MUSIC

(Performing and Communication Arts Division)

To learn more about the Music Department, please visit <http://www.pasadena.edu/academics/divisions/performing-arts/music/index.php>

MUSC 001A MUSIC THEORY I

3 units

Corequisite: MUSC 002A.

Recommended Preparation: The ability to read music in at least one clef. MUSC 041A and/or MUSC 040.

This course, through guided composition and analysis, incorporates the following concepts: rhythm and meter; basic properties of sound; musical terminology; intervals; major and minor scales; diatonic triads in major and minor keys; dominant seventh; basic musical structure; figured bass symbols. Development of skills in handwritten notation is expected. **Recommended** enrollment in MUSC 004A. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: MUS 120

Grade Mode: L, A

MUSC 001B MUSIC THEORY II

3 units

Prerequisite: MUSC 001A or placement based on the music assessment process.

Corequisite: MUSC 002B.

A study of common-practice diatonic harmony and part writing. Principles of harmonic progression involving diatonic triads and dominant seventh chords, an introduction to species (2-part) counterpoint, four part (SATB—Soprano/Alto/Tenor/Bass) writing and arranging, harmonization of given and original melodies, bass line construction, non-chord tones, phrase structure, and a brief historical survey of the development of harmony and texture in Western music. **Recommended** enrollment in MUSC 004B. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: MUS 130

Grade Mode: L, A

MUSC 001C MUSIC THEORY III

3 units

Prerequisite: MUSC 001B.

Corequisite: MUSC 002C.

Incorporating the concepts from MUSC 001B, the course will include: introduction to chromatic harmony, non-dominant 7th chords, secondary/applied chords, modulation, and a study of binary and ternary form. **Recommended** enrollment in MUSC 004C. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: MUS 140

Grade Mode: L, A

MUSC 001D MUSIC THEORY IV

3 units

Prerequisite: MUSC 001C.

Corequisite: MUSC 002D.

This course completes a sequential study of tonal harmony and includes an introduction to 20th century techniques. Topics will include: borrowed chords and modal mixture; the Neapolitan and augmented sixth chords; enharmonic reinterpretation and modulation; altered dominant and 9th chords, contrapuntal techniques of late-Romanticism, and 20th century techniques such as: pandiatonicism; use of synthetic scales; set theory; and rhythm and meter. **Recommended** enrollment in MUSC 004D. Total of 54 hours lecture.

Transfer Credit: CSU, UC. *C-ID: MUS 150

Grade Mode: L, A

MUSC 002A MUSICIANSHIP I

1 unit

Corequisites: MUSC 001A.

Application and development of the materials of MUSC 001A through sight-singing, ear training, and dictation. Topics include rhythm, major and minor scales, intervals, triads, and simple diatonic melodies. Total of 54 hours laboratory.

Transfer Credit: CSU; UC. *C-ID: MUS 125

Grade Mode: L, A

MUSC 002B MUSICIANSHIP II

1 unit

Prerequisite: MUSC 002A.

Corequisites: MUSC 001B.

Application and development of the materials of MUSC 001B through sight-singing, ear training, and dictation. Topics include rhythmic subdivision, diatonic melodies, intervals, alto clef reading, chord progressions with diatonic triads and inversions. Total of 54 hours laboratory.

Transfer Credit: CSU; UC. *C-ID: MUS 135

Grade Mode: L, A

MUSC 002C MUSICIANSHIP III

1 unit

Prerequisite: MUSC 002B.

Corequisites: MUSC 001C.

Application and development of the materials of MUSC 001C through sight-singing, ear training, and dictation. Topics include syncopation, non-dominant 7th chords, secondary dominant chords, and an introduction to modulation. Total of 54 hours laboratory.

Transfer Credit: CSU; UC. *C-ID: MUS 145

Grade Mode: L, A

MUSC 002D MUSICIANSHIP IV

1 unit

Prerequisite: MUSC 002C.

Corequisite: MUSC 001D.

*Course Identification Numbering System (C-ID)

Application and development of the materials of MUSC 001D through sight-singing, ear training, and dictation. Topics include advanced chromaticism, modulation, modality, complex use of rhythm and meter, and an introduction to atonal music. Total of 54 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: MUS 155*

Grade Mode: L, A

MUSC 004A KEYBOARD SKILLS I

1 unit

Corequisites: MUSC 001A, 002A.

Primarily for music majors. Keyboard realization of theoretical and harmonic materials from MUSC 001A and MUSC 002A including melodic harmonization with basic chord patterns and transposition. Fundamentals of body, hand and finger control oriented to the keyboard using a first study book for piano. Development of sight-reading skills and elementary repertoire. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

MUSC 004B KEYBOARD SKILLS II

1 unit

Prerequisite: MUSC 004A.

Corequisites: MUSC 001B, MUSC 002B.

Primarily for music majors. Standard upper elementary repertoire. Keyboard realization of theoretical and harmonic materials from MUSC 001B with emphasis on basic diatonic progressions. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 004C KEYBOARD SKILLS III

1 unit

Prerequisite: MUSC 004B.

Corequisites: MUSC 001C, MUSC 002C.

Primarily for music majors. Standard repertoire representative of music from the Baroque through the contemporary periods. Development of functional keyboard skills correlated with MUSC 001C. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 004D KEYBOARD SKILLS IV

1 unit

Prerequisite: MUSC 004C.

Corequisites: MUSC 001D, MUSC 002D.

Primarily for music majors. Standard repertoire and functional keyboard skills, correlated with MUSC 001D in preparation for the keyboard proficiency examination. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 007A MUSIC HISTORY AND LITERATURE: ANTIQUITY TO 1750

3 units

Prerequisite: MUSC 001B.

Comprehensive examination of the development of Western European music from Antiquity to 1750 through listening, score analysis, and the study of musical techniques. Survey of historical details, including cultural, intellectual, and social influences on musical trends and styles. **For** music majors, but open to all qualified students. **Fall** semester. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: MUS 105*

Grade Mode: L

MUSC 007B MUSIC HISTORY AND LITERATURE: 1750 TO THE PRESENT

3 units

Prerequisite: MUSC 001B.

Recommended Preparation: MUSC 007A.

Comprehensive examination of the development of Western European music from 1750 to the present through listening, score analysis, and the study of musical techniques. Survey of historical details, including cultural, intellectual, and social influences on musical trends and styles. **For** music majors, but open to all qualified students. **Spring** semester. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: MUS 106*

Grade Mode: L

MUSC 008 APPLIED MUSIC

1 unit

Corequisites: MUSC 010; enrollment in one of the following: MUSC 043, 044, 056, 057A-G, 059, 060, 061, 062, 063, 064, 065, 066, 070A-E, 074, 075, 082.

Enrollment Limitation: Audition.

In-class instrumental or vocal performance that reflects individual study with a private teacher (at student expense). Development of interpretational, technical, and presentational skills. **Required** end of semester jury performance. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Applied Music Family:** MUSC 008, 009C, 009E. Total of 18 hours lecture and 90 hours practice laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L

MUSC 009A INDIVIDUAL INSTRUCTION I

1 unit

Corequisites: MUSC 010 and one of the following: MUSC 043, 056, 057A-G, 059, 060, 061, 062, 063, 064, 065, 066, 082.

Enrollment Limitation: Audition.

This course is designed for the entering classical, jazz and commercial music major. It consists of twelve 45-minute

*Course Identification Numbering System (C-ID)

private lessons with an instructor on the Applied Music staff, participation in a weekly music recital class, and an end-of-semester jury performance. Topics include intermediate technical etudes and exercises, tone production, scales, and short performance pieces. **Recommended** enrollment in smaller ensemble and/or jazz groups. Total of 18 hours lecture and 99 hours practice laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 160*

Grade Mode: L

MUSC 009B INDIVIDUAL INSTRUCTION II (CLASSICAL)

1 unit

Prerequisite: MUSC 009A.

Corequisites: MUSC 010 and one of the following, appropriate for the student's study path: MUSC 043, 059, 060, 061, 062, 063, 064, 065, 066, 082.

Designed for the intermediate level classical music major, this course consists of twelve 45-minute private lessons with an instructor on the Applied Music staff, participation in a weekly music recital class, and an end-of-semester jury performance. Building on the foundations already established, emphasis is on representative intermediate repertoire, continued technique development, and introduction to appropriate style and interpretation. **Recommended** enrollment in a chamber ensemble class. Total of 18 hours lecture and 99 hours practice laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 160*

Grade Mode: L

MUSC 009C INDIVIDUAL INSTRUCTION III (CLASSICAL)

1 unit

Prerequisite: MUSC 009B.

Corequisites: MUSC 010 and one of the following, appropriate for the student's study path: MUSC 043, 044, 059, 060, 061, 062, 063, 064, 065, 066, 074, 075, 082.

This course is for the advanced classical music major, and consists of twelve 45-minute private lessons with an instructor on the Applied Music staff, participation in a weekly music recital class, and an end-of-semester jury performance. Emphasis is placed on appropriate interpretation of advanced repertoire, as well as addressing possible new technical demands. **Recommended** enrollment in a chamber ensemble class. **Maximum credit** 2 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Applied Music Family:** MUSC 008, 009C, 009E. Total of 18 hours lecture and 99 hours practice laboratory. This

course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 160*

Grade Mode: L

MUSC 009D INDIVIDUAL INSTRUCTION II (JAZZ/COMMERCIAL)

1 unit

Prerequisite: MUSC 009A.

Corequisites: MUSC 010 and one of the following, appropriate for the student's study path: MUSC 056, 057A-G.

Designed for the intermediate jazz and commercial music major, this course consists of twelve 45-minute private lessons with an instructor on the Applied Music staff, participation in a weekly music recital class, and an end-of-semester jury performance. Building on the foundations already established, emphasis is on representative intermediate repertoire and improvisation, continued technique development, and introduction to appropriate style and interpretation. **Recommended** enrollment in smaller ensemble and/or jazz groups. Total of 18 hours lecture and 99 hours practice laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 160*

Grade Mode: L

MUSC 009E INDIVIDUAL INSTRUCTION III (JAZZ/COMMERCIAL)

1 unit

Prerequisite: MUSC 009D.

Corequisites: MUSC 010 and one of the following, appropriate for the student's study path: MUSC 056, 057A-G.

This course is appropriate for the advanced jazz and commercial music major, and consists of twelve 45-minute private lessons with an instructor on the Applied Music staff, participation in a weekly music recital class, and an end-of-semester jury performance. Emphasis is placed on appropriate interpretation of advanced repertoire, as well as addressing possible new technical and improvisation demands. **Recommended** enrollment in smaller ensemble and/or jazz groups. **Maximum credit** 2 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Applied Music Family:** MUSC 008, 009C, 009E. Total of 18 hours lecture and 99 hours practice laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 160*

Grade Mode: L

MUSC 010 CONCERT MUSIC

1/2 unit

Development of techniques of critical listening through lectures and demonstration. Required attendance at concerts and recitals. **Maximum credit** 2 units, 1/2 unit each

*Course Identification Numbering System (C-ID)

semester. **For** music majors and minors primarily, but open to all qualified students. Total of 18 hours lecture.

Transfer Credit: CSU

Grade Mode: L

MUSC 012 INTRODUCTION TO MUSIC COMPOSITION

3 units

Prerequisite: MUSC 001B.

Survey of contemporary techniques in composition, contemporary literature, and notation. Writing of short pieces for various instruments and voices. Development of a personal approach to composition and an awareness of new compositional ideas and aesthetics. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 015 SEMINAR IN CONDUCTING

2 units

Prerequisite: MUSC 001B or placement based on the music assessment process.

A seminar in the art of gestural communication for the instrumental and choral conductor. Theory and functional application of conducting techniques.. Conducting patterns, cueing, dynamics, and music analysis. Study and preparation of basic procedures in rehearsal pedagogy. Total of 27 hours lecture and 27 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 017 RECITAL AND AUDITION PREPARATION

1 unit

Prerequisite: MUSC 009C or 009E.

Corequisite: One of the following: MUSC 043, 044, 056, 057A-G, 060, 062, 063, 064, 065, 066, 070A-E, 074, 075, 082.

Individual or small-group instruction in the standard literature for the students' performing medium – instrument or voice. Historical context, form and harmonic aspects, technical demands, stylistic nuances, and expressive considerations of the pieces studied. One half-hour weekly with an applied music instructor and participation in an Applied Music recital class. **Required** end of semester jury performance. Preparation for transferring to a four-year school or entering the music industry. **For** students playing at the sophomore level. Total of 18 hours lecture and 99 hours practice laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU

Grade Mode: L

MUSC 018 INDIVIDUAL PERFORMANCE SKILLS

1 unit

Prerequisite: Retention based on successful audition.

Corequisite: MUSC 010.

In-class instrumental or vocal performances that reflects the individual practice on selected materials under the guidance of a faculty adviser. Development of interpretational, technical, and presentational skills. **Required** end of semester jury performance. **For** students performing at college level. Total of 18 hours lecture and 36 hours practice laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 020 INDEPENDENT STUDY

1 unit

Prerequisites: Completion of two semesters of a music sequence in the subject area, and approval of the student project.

Primarily for music majors. Individual projects such as a concert recital, original composition, music arrangement, musicological research paper. Total of 54 hours by arrangement.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L

MUSC 021 MUSIC APPRECIATION

3 units

Introduction to western art music-its understanding and enjoyment, music elements, performance media, style, and literature. Emphasis on critical listening skills. **Required** concert attendance. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: MUS 100*

Grade Mode: L

MUSC 022 MUSIC IN THE CONTEMPORARY WORLD

3 units

Introduction to the music of current Western culture. Emphasis on contemporary classical, jazz, pop, music theater, film and TV media, electronic computer synthesizer. Study of prominent musicians, composers and performers. **Required** concert attendance. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

MUSC 023 MUSIC CULTURES OF THE WORLD

3 units

Introduction to music as a worldwide phenomenon covering folk, popular, and art musics of major geographical areas. Emphasis on music as a component of culture and on the unique ways diverse cultures organize sound into music. Special attention on the musics of ethnic groups represented in Southern California. **Required** concert attendance. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

*Course Identification Numbering System (C-ID)

**MUSC 024A THE JAZZ EXPERIENCE: EVOLUTION
AND ESSENCE**

3 units

Introduction to jazz: its development, major styles, and innovators. Non-technical analysis of jazz's musical and multicultural elements through lecture, demonstration, reading, film, and required listening. **Required** concert attendance. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

MUSC 024B HISTORY OF ROCK MUSIC

3 units

Survey of rock music from the late 1940s to the present – its socio-cultural and historical development. Emphasis on the roots and early development of rock; its stylistic trends and influential artists throughout the years. The politics of rock and the impact of technology. **Required** concert attendance. **No credit** if taken after MUSC 127. Total of 54 hours lecture. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L

MUSC 025 AFRICAN-AMERICAN MUSIC

3 units

Survey of the evolution and development of African-American music. Emphasis on African roots and influence of socio-economic factors. Slave songs and Negro spirituals, ragtime, blues, R & B, jazz from New Orleans through avant-garde, contemporary Black popular music. **Required** concert attendance. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

MUSC 027 ASIAN MUSIC

3 units

Survey of the music of the East Asia, South Asia, Southeast Asia, Central Asia and West Asia (Middle East): historical and cultural influences, social and religious implications, instrumental and vocal styles. **Required** concert attendance. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

MUSC 028 HISTORY OF OPERA

3 units

Analysis of representative operas by the major composers of each period from the 17th through 20th centuries in Europe and the United States. Origin and development of related musical genres, forms, and styles. Emphasis on critical listening skills. **Required** concert attendance. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

**MUSC 030 MUSIC FOR EARLY CHILDHOOD
EDUCATION**

3 units

Survey of music teaching techniques and materials suitable for children ages infancy through 8. Functional skills in reading and performing children's music literature: development of principles for organizing a child development music curriculum. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L

MUSC 032 INTRODUCTION TO MUSIC EDUCATION

2 units Recommended Preparation: MUSC 001A and MUSC 009A.

Survey of the philosophical, historical, cultural, psychological, and curricular foundations of music education in the United States. Guided field observation and analysis of K-12 classes, and in-class teaching demonstrations. **For** music majors entering or considering music teaching as a career. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L

MUSC 034A JAZZ KEYBOARD SKILLS

2 units

Prerequisite: MUSC 004A or 041A.

Recommended Preparation: MUSC 036A.

Study on the keyboard the harmonic and melodic materials of jazz including blues, bossa nova and standard tunes. Introductory skills to play with a jazz feel, create bass lines, accompany singers and instrumentalists, and effectively sight read lead sheets. Technical exercises to improve piano efficiency for jazz and other related styles. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 034B ADVANCED JAZZ KEYBOARD SKILLS

2 units

Prerequisite: MUSC 034A or retention based on successful audition.

Study on the keyboard of advanced techniques and materials of jazz such as: blues, ballads, standard tunes, and modal jazz. Emphasis on the advanced ability to play with a jazz feel, create bass lines, accompany singers and instrumentalists and effectively sight read lead sheets. Advanced technical exercises to improve piano efficiency for jazz and related styles. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer credit: CSU; UC

Grade Mode: L, A

**MUSC 035 MUSIC PREPARATION AND MUSIC
COPYING**

2 units

Prerequisite: MUSC 001A or placement based on the Music assessment process.

Notating music with pen, pencil and computer software. Preparing lead sheets. Extracting parts and producing reduced scores. Reproduction techniques. Pertinent music business aspects. Total of 36 hours lecture and 18 hours music laboratory.

Transfer Credit: CSU

Grade Mode: L, A

MUSC 036A POP-JAZZ THEORY

3 units

Prerequisite: MUSC 001A or MUSC 040 placement based on the Music assessment process.

Major, minor, modal jazz scales. Chord construction: triads through 13ths with alterations, poly chords. Chord families and functions. Common jazz/pop forms. The II-V-I progression with variations and voice leading. Ear training. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 036B JAZZ - COMMERCIAL THEORY

3 units

Prerequisite: MUSC 036A or placement based on the Music assessment process.

Jazz-oriented scales and their applications, contemporary chord voicings, polychords, substitutions. Moving line patterns and harmonic counterlines. Basic chord progressions. Song forms. Four-part writing and arranging. Ear training. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 038C CHINESE MUSIC ENSEMBLE

1 unit

Performance techniques and cultural context of Chinese music. Playing techniques in the zheng (Chinese long zither) and other Chinese musical instruments. Music for duo and small ensemble performance. For students interested in understanding, appreciating, and performing Chinese music. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family:** MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 040 PREPARATORY MUSIC THEORY

3 units

A visual, aural, and kinesthetic introduction to music literacy. Reading and writing rhythmic, melodic, and harmonic notation in treble and bass clefs. Elementary the-

ory, including major scales, the circle of fifths, intervals, and common triads. Fundamental aural skill development through rhythm drills, melodic dictation, singing, and creative exercises. **For** non-music majors and music majors with minimal experience reading music notation. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 041A FIRST YEAR PIANO I

2 units

Primarily for non-music majors. Orientation to the keyboard with emphasis upon finger, hand and body control. Focus on reading music notation. Study of a first year piano book. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 041B FIRST YEAR PIANO II

2 units

Prerequisite: MUSC 041A or retention based on successful audition.

Primarily for non-music majors. Continued study of a first year piano book including repertoire representative of various styles and periods. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 042A SECOND YEAR PIANO I

2 units

Prerequisite: MUSC 041B or retention based on successful audition.

Study and performances of varied Grade II materials and standard piano repertoire. Emphasis on required instrumental skills. Primarily for non-music majors. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 042B SECOND YEAR PIANO II

2 units

Prerequisite: MUSC 042A or retention based on successful audition.

Continued study of Grade II materials and representative piano repertoire. Emphasis on technical facility and musical interpretation. Primarily for non-music majors. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 043 PIANO ENSEMBLE

1 unit

Prerequisite: *Retention based on successful audition.*

Ensemble experience for the pianist. Varied levels of both duet, duo and multi-piano literature. A variety of musical styles and their interpretations. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Instrumental Ensemble Family:** MUSC 043, 053, 060, 062, 133AB. Total of 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L

MUSC 044 PIANO ACCOMPANYING

1 unit

Prerequisite: *Retention based on successful audition.*

Introduction to the techniques of accompanying vocalists and instrumentalists. Study and performance of accompaniment repertoire: art songs and instrumental literature. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family:** MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. Total of 18 hours lecture and 36 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 045A INTERMEDIATE IMPROVISATION

3 units

Prerequisite: *MUSC 144 or retention based on successful audition.*

Techniques of improvisation including a background of theory and skills. Experience in combo performance. Total of 54 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 045B ADVANCED IMPROVISATION

3 units

Prerequisite: *MUSC 045A.*

Advanced techniques of jazz improvisation for small ensembles. Harmonic, melodic and rhythmic approaches to jazz improvisation. Altered and extended harmonies and associated scales. Transcription and ear training. Total of 54 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 053 INSTRUMENTAL/VOCAL WORKSHOPS

1 unit

Prerequisite: *Retention based on successful audition.*

Rehearsal and public performance of representative litera-

ture for varied types of large and small ensembles. **Required** instructional trips. **Maximum of 4 enrollments** allowed in the **Instrumental Ensemble Family:** MUSC 043, 053, 060, 062, 133AB. **Recommended** previous instrumental or vocal ensemble experience. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 054 LANCER VARSITY BAND

1 unit

Rehearsal and performance of selected band literature appropriate for sporting and community special events. **Required** instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Marching/Pep Ensemble Family:** MUSC 054, 055, 061. **For** students playing marching band instruments, drum set, and electric bass. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 055 TOURNAMENT OF ROSES BAND

2 units

Enrollment Limitation: *Audition.*

Rehearsal and performance of music and marching drill techniques appropriate to parade functions. Schedule of required rehearsals and performances published at first meeting. **Required** instructional trips. **Students** currently enrolled in a high school band program are eligible to audition. **Maximum credit** 8 units, 2 units each semester. **Maximum of 4 enrollments** allowed in the **Marching/Pep Ensemble Family:** MUSC 054, 055, 061. Total of 54 hours to be arranged lecture and 54 hours to be arranged laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

MUSC 056 VOCAL JAZZ ENSEMBLE

1 unit

Prerequisite: *Retention based on successful audition.*

Enrollment Limitation: *Audition.*

Rehearsal and performance of literature suitable to the vocal jazz ensemble. Vocal and choral techniques and improvisation. **Required** instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** in the **Jazz Ensemble Family:** MUSC 056, 057BCDFG, 133D. Total of 72 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

Grade Mode: L, A

MUSC 057A JAZZ COMBO

1 unit

Prerequisite: *Retention based on successful audition.*

Theory, history, rehearsal and performance of all jazz styles from New Orleans to avante-garde using written

arrangements and lead sheets. Multiple jazz combos will be selected to rehearse, prepare and perform jazz musical repertoire. Opportunities for extended improvised soloing as part of a small jazz group, typically trios to septets including horns and rhythm section. **Required** instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family**: MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. Total of 54 hours laboratory and 18 hours TBA laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

Grade Mode: L, A

MUSC 057B LANCER JAZZ BIG BAND

1 unit

Prerequisite: *Retention based on successful audition.*

Theory, history, rehearsal and performance of traditional and contemporary literature for standard 17-piece big band. Development of reading, stylistic and ensemble skills. Instrumentation includes five saxophones, four trumpets, four trombones, piano, guitar, bass, drums. **Required** instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Jazz Ensemble Family**: MUSC 056, 057BCDF, 133D. **For** students playing at college level. Total of 54 hours lecture and 18 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

Grade Mode: L, A

MUSC 057C STUDIO JAZZ ENSEMBLE

1 unit

Prerequisite: *Retention based on successful audition.*

Theory, history, rehearsal and performance of compositions and arrangements by the important jazz writers. A 17- to 20-piece big band for the more advanced players. Development of aural, technical and interpretive skills. **Required** instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Jazz Ensemble Family**: MUSC 056, 057BCDF, 133D. **For** students playing at college level. Total of 54 hours lecture and 18 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

Grade Mode: L, A

MUSC 057D SWING BAND

1 unit

Prerequisite: *Retention based on successful audition.*

Theory, history, rehearsal and performance of music from and in the style of the Swing Era. A standard 17-piece big band with vocalist. Development of jazz and dance

band interpretations. **Required** instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Jazz Ensemble Family**: MUSC 056, 057BCDF, 133D. **For** students playing at college level. Total of 54 hours lecture and 18 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

Grade Mode: L, A

MUSC 057E JAZZ GUITAR ENSEMBLE

1 unit

Prerequisite: *Retention based on successful audition.*

Theory, history, rehearsal and performance of compositions and arrangements for jazz guitar ensemble. Development of reading, technical and interpretive skills. **Required** instructional trips. **Recommended** completion of MUSC 111A-B. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family**: MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. **For** guitarists, bassists and drummers playing at college level. Total of 54 hours lecture and 18 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

Grade Mode: L, A

MUSC 057F LATIN JAZZ ENSEMBLE

1 unit

Prerequisite: *Retention based on successful audition.*

Theory, history, rehearsal and performance of music in the Latin jazz idiom. A conjunto (smaller band) typically consisting of 3-4 horns, rhythm section, timbales, congas, bongos, hand percussionists, and optional vocalist. **Required** instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Jazz Ensemble Family**: MUSC 056, 057BCDF, 133D. Total of 54 hours lecture and 18 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

Grade Mode: L, A

MUSC 057I VOCAL JAZZ COMBO

1 unit

Enrollment Limitation: *Retention based on successful audition.*

Theory, history, rehearsal and performance of all jazz styles from New Orleans to avant-garde using lead sheets. Opportunities for extended improvised soloing as part of a combo band and jazz vocalists, typically a rhythm section and 2 horns. **Required** instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family**: MUSC 038C, 044, 057AEH, 070ABCDE, 082, 133E. Total of 72 hours

**Course Identification Numbering System (C-ID)*

laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 060 COLLEGE/COMMUNITY ORCHESTRA

1 unit

Prerequisite: *Retention based on successful audition.*

Study and performance of standard and contemporary literature of the symphony orchestra. **For** students playing at college level. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Instrumental Ensemble Family:** MUSC 043, 053, 060, 062, 133AB. Total of 54 hours lecture and 18 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

Grade Mode: L, A

MUSC 061 LANCER MARCHING BAND

2 units

Prerequisite: *Retention based on successful audition.*

Recommended Preparation: *Previous band experience.*

Rehearsal and performance of representative band literature. Emphasis on development of music reading, instrumental skills and marching techniques. **Required** instructional trips. **Recommended** previous band experience. **Maximum credit** 8 units, 2 units each semester. **Maximum of 4 enrollments** allowed in the **Marching/Pep Ensemble Family:** MUSC 054, 055, 061. **Fall** semester. **Satisfies** one unit of Physical Education Activity credit each semester. Total of 81 hours lecture and 63 hours laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC credit limitations.

*See counselor. *C-ID: MUS 180*

Grade Mode: L, A

MUSC 062 LANCER CONCERT BAND

2 units

Prerequisite: *Retention based on successful audition.*

Rehearsal and performance of representative band literature. Emphasis on development of music reading, instrumental skills. **Required** instructional trips. **Maximum credit** 8 units, 2 units each semester. **Maximum of 4 enrollments** allowed in the **Instrumental Ensemble Family:** MUSC 043, 053, 060, 062, 133AB. **Spring** semester. Total of 108 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

Grade Mode: L, A

MUSC 063 CONCERT CHOIR

1 unit

Rehearsal and performance of literature suitable to the large ensemble (80-100). Extensive training in vocal and choral techniques. **Required** instructional trips. **For** students singing at college level. **Maximum credit** 4 units, 1 unit each semester. **For** students singing at college level. **Maximum of 4 enrollments** allowed in the **Choral Ensemble Family:** MUSC 063, 064, 066, 133C. Total of 72 hours laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 064 CHAMBER SINGERS

1 unit

Prerequisite: *Retention based on successful audition.*

Rehearsal and performance of representative major works suitable to the small ensemble (30-40). Advanced choral and vocal techniques. **Required** instructional trips. **For** students singing at college level. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Choral Ensemble Family:** MUSC 063, 064, 066, 133C. Total of 90 hours laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

Grade Mode: L, A

MUSC 066 MADRIGALS

1 unit

Prerequisite: *Retention based on successful audition.*

Enrollment Limitation: *Audition.*

Rehearsal and performance of representative vocal literature, for 4 and 5 part small ensemble (20), of the major historical periods, i.e., Renaissance, Baroque, 20th Century. Advanced choral and vocal techniques. **For** students performing at college level. **Required** instructional trips. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Choral Ensemble Family:** MUSC 063, 064, 066, 133C. Total of 72 hours laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

Grade Mode: L, A

MUSC 067 MUSIC THEATER PRODUCTION

1 unit

Prerequisite: *Audition.*

Rehearsal and performance of literature from the musical theater. **Required** instructional trips. **For** students performing at college level. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Musical Theater Production Family:** MUSC 067, 074, 075,

**Course Identification Numbering System (C-ID)*

076, THRT 075, 027. Total of 54 hours laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 070A WOODWIND ENSEMBLES

1 unit

Prerequisite: Enrollment in or completion of one of the following: MUSC 055, 057A-G, 059, 060, 061, 062, 065 or retention based on successful audition.

Rehearsal and performance of standard and contemporary woodwind ensemble literature. Concert(s) each semester.

For students playing at college level. **Recommended** MUSC 008 or 009. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family**: MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 070B BRASS ENSEMBLES

1 unit

Prerequisite: Enrollment in or completion of one of the following: MUSC 055, 057A-G, 059, 060, 061, 062, 065 or retention based on successful audition.

Rehearsal and performance of standard and contemporary brass ensemble literature. Concert(s) each semester. **For** students playing at college level. **Recommended** MUSC 008 or 009. **Maximum credit** 4 units, 1 unit each semester.

Maximum of 4 enrollments allowed in the **Chamber Ensemble Family**: MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 070C PERCUSSION ENSEMBLE

1 unit

Prerequisite: MUSC 087A or 087B, or enrollment in or completion of one of the following: MUSC 055, 057A-G, 060, 061, 062, 065 or retention based on successful audition.

Rehearsal and performance of traditional and contemporary percussion ensemble literature. Concert(s) given each semester. **Recommended:** MUSC 008 or 009. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family**: MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. **For** students playing at college level. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 070D TROMBONE AND TUBA ENSEMBLES

1 unit

Prerequisite: Enrollment in or completion of one of the following: MUSC 055, 057A-G, 060, 061, 062, 065 or retention

based on successful audition.

Rehearsal and performance of standard and contemporary trombone and tuba ensemble literature. Concert(s) each semester. **For** students playing at college level. **Recommended:** MUSC 008 or 009. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family**: MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 070E CHAMBER MUSIC

1 unit

Prerequisite: Enrollment in or completion of one of the following: MUSC 043, 055, 057A-G, 059, 060, 061, 062, 065, 070A-D, 082, or retention based on successful audition.

Rehearsal and performance of standard and contemporary ensemble literature for strings with or without other instruments or voice. Concert(s) each semester. **For** students playing at college level. **Recommended:** MUSC 008 or 009.

Maximum credit 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family**: MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 071A VOICE TECHNIQUES I

2 units

Exploration of the fundamentals of vocal technique and singing for the beginning voice student. Posture, breath control, tone resonance, vowel placement, registration. Class singing and solo singing from basic text and supplementary materials. **Recommended** enrollment in MUSC 102. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 071B VOICE TECHNIQUES II

2 units

Prerequisite: MUSC 071A or retention based on successful audition.

Continuing development of the fundamentals of vocal technique and singing for the second semester beginning voice student. Solo singing from basic text and supplementary materials. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 072 SECOND YEAR VOICE TECHNIQUES

2 units

Prerequisite: *MUSC 071B or audition.*

Further development of voice techniques, posture, breath control, tone resonance, vowel placement, registration. Emphasis on performance in class of vocal literature, including folk songs, musical theater, religious songs and elementary art songs. Materials adapted to individual needs. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 073A VOCAL PERFORMANCE TECHNIQUES

1 unit

Prerequisite: *Enrollment in or completion of MUSC 009C or audition.*

Preparation for solo performance; the aspects of learning a song or aria: background, meaning, musical and dramatic analysis, musical and dramatic interpretation. Materials adapted to individual needs. Total of 18 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 073B ADVANCED VOCAL PERFORMANCE TECHNIQUES

1 unit

Prerequisite: *MUSC 073A.*

Further development of musical and dramatic communication through performance. Project preparation and performance (recital, audition recording). Materials adapted to individual needs. Total of 18 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 074 OPERA WORKSHOP

2 units

Prerequisite: *Retention based on successful audition.*

Preparation, rehearsal, and performance of opera excerpts. Study of stage movement, musical styles, and dramatic techniques for the intermediate and advanced voice student. **Recommended** vocal training. **Maximum of 4 enrollments** allowed in the **Musical Theater Production Family:** MUSC 067, 074, 075, 076, THRT 075, 027. **For** students performing at college level. Total of 54 hours laboratory and 54 hours laboratory using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

Grade Mode: L, A

MUSC 075 MUSICAL THEATER WORKSHOP

2 units

Interdisciplinary course: Music, Theater Arts

Prerequisite: *Retention based on successful audition.*

Techniques, skills, theory and practice of musical theater performance and audition. The practice of songs, scenes and dance for performance on the live stage. **May not be taken concurrently** with or after THRT 075. **Maximum credit** 8 units, 2 units each semester. **Maximum of 4 enrollments** allowed in the **Musical Theater Production Family:** MUSC 067, 074, 075, 076, THRT 075, 027. Total of 72 hours laboratory, 36 hours "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

Grade Mode: L, A

MUSC 076 OPERA PRODUCTION

2 units

Recommended Preparation: *Vocal training.*

Enrollment Limitation: *Audition.*

Preparation, rehearsal and performance of a full opera production. **Maximum credit** 8 units, 2 units each semester. **Maximum of 4 enrollments** allowed in the **Musical Theater Production Family:** MUSC 067, 074, 075, 076, THRT 075, 027. Total of 144 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 077A DICTION FOR SINGERS – ENGLISH AND ITALIAN

2 units

Basics of singing diction for English and Italian repertoire. International Phonetic Alphabet (IPA), transcription and decoding skills, speaking, and singing of texts from pieces assigned in course. Total of 36 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 077B DICTION FOR SINGERS – GERMAN AND FRENCH

2 units

Basics of singing diction for German and French repertoire. International Phonetic Alphabet (IPA), transcription and decoding skills, speaking, and singing of texts from pieces assigned in course. Total of 36 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 081A FIRST YEAR CLASSICAL GUITAR

1 unit

Use of right and left hands and simple strokes. Basic theory, elements of musicianship. Fingering and interpretation of elementary guitar music. Solo and class performance. Total of 36 hours lecture and 18 hours music laboratory.

*Course Identification Numbering System (C-ID)

This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 081B FIRST YEAR CLASSICAL GUITAR

1 unit

Prerequisite: *MUSC 081A or retention based on successful audition.*

Further development of right and left hands and fingering, shifting, arpeggios, legato, exchange technique. Major and minor scales, seventh and augmented chords. Fingering and interpretation of elementary and intermediate level guitar music. Solo and class performance. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 081C SECOND YEAR CLASSICAL GUITAR

1 unit

Prerequisite: *MUSC 081B or retention based on successful audition.*

Continued development of the technical skills and musical understanding required to perform intermediate to advanced classical guitar literature. Legato and barring techniques, Segovia scale fingerings, tandem finger movements, sonorities, playing in seventh position and beyond. Form analysis, ornaments. Total of 36 hours lecture and 18 hours music laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 082 GUITAR ENSEMBLE

1 unit

Prerequisite: *Retention based on successful audition.*

Rehearsal and performance of original and transcribed guitar ensemble literature. Emphasis on preparation of music for performance, developing ensemble skills and improving sight reading. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family:** MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. **For** students playing at college level. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

MUSC 083A BEGINNING GUITAR

1 unit

Basic right and left hand playing techniques. Tuning, notation, basic music theory, reading and playing of simple melodies and accompaniments. **Recommended** enrollment in MUSC 101 or 102. Total of 36 hours lecture and 18 hours

music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 083B BEGINNING GUITAR

1 unit

Prerequisite: *MUSC 083A or retention based on successful audition.*

Extended chords in first position, bar chords, movable scales, arpeggios, note reading in fifth position and simple solos. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 084 INTERMEDIATE GUITAR

1 unit

Prerequisite: *MUSC 083B or retention based on successful audition.*

Guitar literature and techniques. Emphasis on individual progress in execution and interpretation. Total of 36 hours lecture and 18 hours music laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 085A WOODWINDS I

2 units

Fundamental techniques and care and maintenance of standard woodwind instruments. Reading beginning level music. Total of 27 hours lecture and 27 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 085B WOODWINDS II

2 units

Prerequisite: *MUSC 085A.*

Continued development of beginning performance techniques on standard woodwind instruments. Reading beginning to intermediate level music. Total of 27 hours lecture and 27 hours arranged in the music laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 086A BRASS I

2 units

Fundamental techniques and care and maintenance of standard brass instruments. Reading beginning level music. Total of 27 hours lecture and 27 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

MUSC 086B BRASS II**2 units****Prerequisite:** MUSC 086A.

Continued development of beginning performance techniques on standard brass instruments. Reading beginning to intermediate level music. Total of 27 hours lecture and 27 hours laboratory.

*Transfer Credit: CSU; UC***Grade Mode:** L, A**MUSC 087A PERCUSSION INSTRUMENT TECHNIQUES****2 units****Recommended Preparation:** *Ability to read rhythmic notation.*

Rudiments of standard percussion instruments with emphasis upon snare drum. **Recommended** ability to read music. Total of 36 hours lecture and 18 hours laboratory.

*Transfer Credit: CSU; UC***Grade Mode:** L, A**MUSC 088A STRING I****2 units**

Fundamental techniques, including position, fingering, bowing of standard orchestral string instruments. Reading beginning level music. Total of 27 hours lecture and 27 hours laboratory.

*Transfer Credit: CSU; UC***Grade Mode:** L, A**MUSC 088B STRING II****2 units****Prerequisite:** MUSC 088A.

Continued development of fundamental techniques, including position, fingering, bowing on a standard orchestral string instrument. Reading beginning-intermediate level music. Total of 27 hours lecture and 27 hours laboratory.

*Transfer Credit: CSU; UC***Grade Mode:** L, A**MUSC 093A INTRODUCTION TO MUSIC BUSINESS
AND ENTREPRENEURSHIP****2 units**

Overview of making a career in music with a focus on entrepreneurial skills. Understanding academic programs in music in higher education. Introduction to fundamental business and personal finance skills, analysis of current trends in advertising and marketing music and musicians. **For** students in the Music Entrepreneurship Certificate program, but open to all interested students. Total of 36 hours lecture.

*Transfer Credit: CSU***Grade Mode:** L, A**MUSC 093B THE MUSIC BUSINESS****2 units****Prerequisite:** MUSC 093A.

Overview of music in the marketplace, including the processes of promotion, publicity, artist management, talent agents, recording strategies, selling music through the internet, copyrights, and royalties. Total of 36 hours lecture.

*Transfer Credit: CSU***Grade Mode:** L, A**MUSC 094 INTRO TO MUSIC TECHNOLOGY
FOR MUSICIANS****3 units****Prerequisite:** *One of the following: MUSC 001A, 040, 041A or placement based on the music assessment process.*

Introduction to music technology tools commonly used by musicians and music educators. Basic computer notation, MIDI, recording, digital audio workstations, microphone techniques and sound reinforcement. Total of 54 hours lecture and 18 hours music laboratory.

*Transfer Credit: CSU***Grade Mode:** L, A**MUSC 096A INTRODUCTION TO MUSIC RECORDING
AND PRODUCTION****3.5 units****Prerequisite:** *One of the following: MUSC 001, 040, 041A or placement based on the music assessment process.*

Introduction to computer music production. Use of MIDI (Musical Instrumental Digital Interface), methods of triggering MIDI (controllers, sequencers etc.), samplers and synthesizers, digital audio recording, signal processing. Aesthetic principles of music production. Total of 54 hours lecture and 36 hours laboratory.

*Transfer Credit: CSU***Grade Mode:** L, A**MUSC 096B MUSIC RECORDING & PRODUCTION
APPLICATIONS****3.5 units****Prerequisite:** MUSC 096A.

Production of music projects using modern recording techniques. Utilization of microphones & preamps, hardware & virtual mixers, outboard plug-in effects, and other associated digital audio workstation components. Music production values are studied through analytical listening. Total of 54 hours lecture and 36 hours laboratory.

*Transfer Credit: CSU***Grade Mode:** L, A

**MUSC 096C MUSIC RECORDING & PRODUCTION
WORKSHOP**

3.5 units

Prerequisite: MUSC 096A.

Strategies for mixing pre-recorded, multi-track music. Critical listening, musical aesthetics of recorded music. Room acoustics for critical listening. Extensive use of equalizers, dynamics and time-based effects. Advanced signal routing. Extensive hands-on projects. Total 54 hours lecture and 36 hours laboratory.

Transfer credit: CSU

Grade Mode: L, A

**MUSC 099 MUSIC ENTREPRENEURSHIP PRACTICUM
2 units**

Prerequisite: MUSC 093A.

Analysis of case studies of music-related projects such as recitals, recordings, business plans and music videos. The practicum culminates in the planning and presentation of individual capstone projects. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

**MUSC 101 MUSIC FUNDAMENTALS
1/2 unit**

A multi-media music course. Introduction to music notation, melodic and rhythmic. Note values, meter, time signatures, the grand staff, major scales and keys. Total of 27 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Grade Mode: L

**MUSC 105 POPULAR SONGWRITING
3 units**

Theory and practice in popular songwriting. Music fundamentals, lyric construction, and marketing techniques. For students interested in developing their songwriting capabilities for the commercial music industry. **Recommended** enrollment in MUSC 102 and/or MUSC 041A. Total of 54 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

Grade Mode: L, A

**MUSC 112A ELECTRIC BASS TECHNIQUES
2 units**

Theory and technique of playing electric bass: hand position, fingering, tuning, and maintenance. Fundamentals of music theory including scales, intervals, and triads. Reading and counting of contemporary and traditional music. Student must provide own instrument. **Recommended** enrollment in MUSC 101 or 102. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Grade Mode: L, A

**MUSC 112B ELECTRIC BASS REPERTOIRE
2 units**

Prerequisite: MUSC 112A or retention based on successful audition.

Study of bass lines in Jazz, Latin, Rock and classical music. Seventh and altered chords, pedal tones, and chord progressions. Further development of reading skills. Emphasis on playing in time. Function of bass in traditional and contemporary music. Music business considerations. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Grade Mode: L, A

**MUSC 115 CONTEMPORARY GUITAR TECHNIQUES
2 units**

Recommended preparation: MUSC 083A.

Enrollment Limitation: Retention based on successful audition.

Intermediate level guitar techniques in popular styles. Melody and chord reading, right and left hand technique, accompaniment patterns, and improvisation. Playing solos and rhythm section concepts in duos, trios, and quartets.

Recommended ability to read melodies and play major and minor chords in first position. Total of 36 hours lecture and 18 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Grade Mode: L, A

**MUSC 116 DRUM SET TECHNIQUES
2 units**

Recommended preparation: MUSC 087A or enrollment as drummer/percussionist in one of the following: MUSC 057A-G 059, 061, 062, 065, 070C or retention based on successful audition.

Basic techniques of drum set playing. Emphasis on hand-foot coordination. Styles studied include jazz, Latin and rock. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Grade Mode: L, A

**MUSC 117 RHYTHM SECTION TECHNIQUES
2 units**

Enrollment Limitation: Audition.

Theory and techniques of playing in a rhythm section both as an independent unit and as the accompaniment to soloists, combos and big bands. Interpretation of individual function, style and written notation in jazz, rock, Latin and swing ensembles. **For** pianists, guitarists, bassists, set drummers, and percussionists. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Grade Mode: L, A

MUSC 121 LATIN PERCUSSION TECHNIQUES**2 units**

Percussion performance in Afro-Cuban and Brazilian musical styles. Playing techniques on specific instruments and idiomatic rhythmic patterns associated with regional musical styles. Instruments include congas, claves, guiro, timbales, cowbell, shekere, and bongos. Total of 36 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Grade Mode: L, A**MUSC 129A MUSIC IN MULTIMEDIA****3 units****Prerequisite:** MUSC 001B and 096A.

Survey of techniques for placing music in multimedia. Musical sources including music libraries, licensing existing music and composing original music for media. Musical techniques specific to media including tempo-mapping to accommodate dramatic action, spotting sessions, and narrative composition. Production techniques including MIDI and audio recording and score preparation for recording sessions. Total of 54 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Grade Mode: L, A**MUSC 131 MULTICULTURAL MUSIC MATERIALS
FOR YOUNG CHILDREN****3 units****Recommended preparation:** MUSC 030.

Introduction to the basic concepts of multicultural education as applied to music for young children. Focus on varied musical arts of worldwide cultures reflected in North American society. Development of age-appropriate teaching strategies, materials, and resources designed to enhance multicultural music experiences for young children in group settings. Meets partial fulfillment of the requirements for Child Development specialization in preschool music education. Total of 54 hours lecture.

Grade Mode: L**MUSC 133A PERFORMANCE ENSEMBLE —
ORCHESTRA****1 unit****Prerequisite:** *Retention based on successful audition.*

Rehearsal and preparations for actual performance by soloists and ensembles. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Instrumental Ensemble Family:** MUSC 043, 053, 060, 062, 133AB. Total of 18 hours lecture.

Grade Mode: L, A**MUSC 133B PERFORMANCE ENSEMBLE —
CONCERT BAND****1 unit****Prerequisite:** *Retention based on successful audition.*

Rehearsal and preparations for actual performance by soloists and ensembles. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Instrumental Ensemble Family:** MUSC 043, 053, 060, 062, 133AB. Total of 18 hours lecture.

Grade Mode: L, A, P**MUSC 133C PERFORMANCE ENSEMBLE — CHOIR**
1 unit**Prerequisite:** *Retention based on successful audition.*

Rehearsal and preparations for actual performance by soloists and ensembles. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Choral Ensemble Family:** MUSC 063, 064, 066, 133C. Total of 18 hours lecture.

Grade Mode: L, A**MUSC 133D PERFORMANCE ENSEMBLE — JAZZ**
1 unit**Prerequisite:** *Retention based on successful audition.*

Rehearsal and preparations for actual performance by soloists and ensembles. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Jazz Ensemble Family:** MUSC 056, 057BCDF, 133D. Total of 18 hours lecture.

Grade Mode: L, A**MUSC 133E PERFORMANCE ENSEMBLE —
SMALL GROUPS****1 unit****Prerequisite:** *Retention based on successful audition.*

Rehearsal and preparations for actual performance by soloists and ensembles. **Maximum credit** 4 units, 1 unit each semester. **Maximum of 4 enrollments** allowed in the **Chamber Ensemble Family:** MUSC 038C, 044, 057AEI, 070ABCDE, 082, 133E. Total of 18 hours lecture.

Grade Mode: L, A**MUSC 135 CURRICULUM APPLICATIONS OF MUSIC
IN EARLY CHILDHOOD EDUCATION****3 units****Recommended preparation:** MUSC 030.

Development and application of music curriculum in approved group programs for children from infancy through school age. Observing, planning, and guiding musical play and learning. Practical application of theoretical concepts. Meets partial fulfillment of the requirement for specialization in preschool music education. Total of 54 hours lecture.

Grade Mode: L

MUSC 144 INTRODUCTION TO IMPROVISATION**3 units****Recommended preparation:** *MUSC 040.*

Techniques of improvisation including a background of theory and skills. Experience in combo performance. Total of 54 hours lecture and 18 hours music laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Grade Mode: L, A**MUSC 171A BEGINNING TECHNIQUES OF POPULAR SINGING****2 units**

Development of basic techniques and skills appropriate for singing various styles of popular music. Emphasis on fundamental singing techniques, interpretation, and stage presence. Music technology and the business of music. Solo singing performance required. Total of 36 hours lecture and 18 hours laboratory.

Grade Mode: L**MUSC 171B INTERMEDIATE TECHNIQUES OF POPULAR SINGING****2 units****Prerequisite:** *MUSC 171A.*

Development of intermediate level techniques and skills appropriate for singing various styles of commercial and popular music. Emphasis on fundamental singing techniques, song interpretation, and remembering how to enjoy performing. Music technology and the business of music. Ensemble and solo singing performance required. Total of 36 hours lecture and 18 hours laboratory.

Grade Mode: L**NURSING****(Health Sciences Division)****NURS 040 MATERNAL NEWBORN NURSING****1 unit****Prerequisites:** *NURS 050, 050L, 050S, 137, and 138.***Corequisite:** *NURS 040L.*

Nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse maternal, newborn clients and their families. Integrate professional nursing roles of clinician, teacher, leader, and advocate while demonstrating critical thinking and nursing process in the care of patient response to physiological and psychosocial health conditions of maternal and newborn clients. Total of 18 hours lecture.

*Transfer Credit: CSU***Grade Mode:** L, A**NURS 040L MATERNAL NEWBORN NURSING LAB****2 units****Prerequisite:** *NURS 050, 050L, 050S, 137, and 138.***Corequisite:** *NURS 040.*

Application of nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse maternal, newborn patients and their families. Implement professional nursing roles of clinician, teacher, leader, and advocate while demonstrating critical thinking and nursing process in the care of client response to physiological and psychosocial conditions of maternal and newborn clients. **Pass/no pass grading.** Total of 108 hours laboratory.

*Transfer Credit: CSU***Grade Mode:** A, P**NURS 041 PEDIATRIC NURSING****1 unit****Prerequisite:** *NURS 050, 050L, 050S, 137 and 138.***Corequisite:** *NURS 041L.*

Nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse pediatric clients and their families. Integrate professional nursing roles of clinician, teacher, leader, and advocate while demonstrating critical thinking and nursing process in the care of pediatric client response to physiological and psychosocial health conditions of child and adolescent patients. Total of 18 hours lecture.

*Transfer Credit: CSU***Grade Mode:** L, A**NURS 041L PEDIATRIC NURSING LAB****2 units****Prerequisite:** *NURS 050, 050L, 050S, 137 and 138.***Corequisite:** *NURS 041.*

Application of nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse pediatric patients and their families. Implement professional nursing roles of clinician, teacher, leader, and advocate while demonstrating critical thinking and nursing process in the care of patient response to physiological and psychosocial conditions of child and adolescent patients. **Pass/no pass grading.** Total of 108 hours laboratory.

*Transfer Credit: CSU***Grade Mode:** A, P**NURS 042 PSYCHIATRIC MENTAL HEALTH NURSING****1 unit****Prerequisite:** *NURS 051A, 051L, 040, 040L, 041, 041L, and 051S.***Corequisite:** *NURS 042L.*

Nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse psychiatric - mental health patients across the lifespan. Integrate professional nursing roles of

clinician, teacher, leader, and advocate while demonstrating critical thinking and nursing process in the care of patient response to mental health conditions. Total of 18 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

NURS 042L PSYCHIATRIC MENTAL HEALTH NURSING LAB

1½ units

Prerequisites: NURS 051A, 051L, 051S, 040, 040L 041 and 041L.

Corequisite: NURS 042.

Application of nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse psychiatric - mental health patients across the lifespan. Implement professional nursing roles of clinician, teacher, leader, and advocate while demonstrating critical thinking and nursing process in the care of client response to mental health conditions. **Pass/no pass grading.** Total of 81 hours lecture.

Transfer Credit: CSU

Grade Mode: A, P

NURS 050 FOUNDATIONAL NURSING CARE

3 units

Corequisites: NURS 050L, NURS 050S, and either NURS 137 or NURS 138.

Enrollment Limitation: Acceptance in the Registered Nursing Program.

Introduction to foundational nursing theory and concepts that integrate the nursing roles of clinician, teacher, leader, and advocate while relating the concepts of patient-centered care, teamwork and collaboration, evidence-based practice, safety, informatics, and professionalism to the foundational nursing care of adult and geriatric patients. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L

NURS 050L FOUNDATIONAL NURSING CARE – CLINICAL

5 units

Corequisites: NURS 050, NURS 050S, and either NURS 137 or NURS 138.

Enrollment Limitation: Admission into the Registered Nursing Program.

Introduction to foundational nursing skills and clinical reasoning that integrate the nursing roles of clinician, teacher, leader, and advocate while relating the concepts of patient-centered care, teamwork and collaboration, evidence-based practice, safety, informatics, and professionalism to the foundational nursing care of adult and geriatric patients. Total of 270 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, P

NURS 050S FOUNDATIONAL NURSING – SEMINAR

1 unit

Corequisites: NURS 050, NURS 050L.

Foundational nursing theory and concepts to promote and maintain safe and effective health care. Critical thinking and the nursing process in the foundational care of patient responses to physiological and psychosocial health conditions of adult and geriatric clients. Total of 18 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

NURS 051A BEGINNING MEDICAL SURGICAL NURSING

1 unit

Prerequisites: All of the following: NURS 050, 050L, 050S, 137, and 138.

Corequisites: NURS 051L and NURS 051S.

Beginning nursing theory and concepts to promote and maintain a safe, developmentally appropriate, outcome-focused health care for culturally diverse adult and geriatric medical surgical patients. Integrate professional nursing roles of clinician, teacher, leader, advocate while demonstrating critical thinking and nursing process in the care of patient response to physiological and psychosocial health conditions of adult and geriatric patients. Total of 18 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

NURS 051L BEGINNING MEDICAL SURGICAL NURSING LAB

2 units

Prerequisites: All of the following: NURS 050, 050L, 050S, 137, and 138.

Corequisites: NURS 051A and NURS 051S.

Application of beginning nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse adult and geriatric medical surgical patients. Implement professional nursing roles of clinician, teacher, leader, and advocate while demonstrating critical thinking and nursing process in the care of adult and geriatric patients. **Pass/no pass grading.** Total of 108 hours laboratory.

Grade Mode: L, A

Transfer Credit: CSU

Grade Mode: A, P

NURS 051S BEGINNING NURSING – SEMINAR

1 unit

Prerequisites: NURS 050, 050L, 050S, 137, and 138.

Corequisites: NURS 051A and 051L or NURS 040 and 040L or NURS 041 and 041L.

Beginning nursing theory and concepts including leadership, patient-centered care, safety, evidence-based practice, informatics, and communication as they apply to pa-

tients and their families at a beginning level. Exploration and analysis of current nursing research and its application to specific clinical issues or conditions. Development of educational presentations and practice of leadership and communications skills. Total of 18 hours lecture.

Transfer credit: CSU

Grade Mode: L

NURS 052A INTERMEDIATE MEDICAL SURGICAL NURSING

2 units

Prerequisites: (1) NURS 051A, 051L, 051S, 040, 040L, 041, and 041L or (2) NURS 210 and acceptance into the career ladder LVN to RN program.

Corequisites: NURS 052L and 052S.

Intermediate medical surgical nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse adult and geriatric medical surgical patients. Integrate professional nursing roles of clinician, teacher, leader, and advocate while demonstrating critical thinking and nursing process in the care of patient response to physiological and psychosocial health conditions of adult and geriatric patients. Total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

NURS 052L INTERMEDIATE MEDICAL SURGICAL NURSING LAB

3¹/₂ units

Prerequisites: All of the following: NURS 051A, 051L, 051S, 040, 040L, 041, and 041L.

Corequisite: NURS 052A.

Application of intermediate nursing theory and concepts to promote and maintain safe, developmentally appropriate, outcome-focused health care for culturally diverse adult and geriatric medical surgical clients. Implement professional nursing roles of clinician, teacher, leader and advocate while demonstrating critical thinking and nursing process in the care of client response to physiological and psychosocial conditions of adult and geriatric clients.

Pass/no pass grading. Total of 189 hours laboratory.

Transfer Credit: CSU

Grade Mode: A, P

NURS 052S INTERMEDIATE NURSING CARE – SEMINAR

1 unit

Corequisites: NURS 052, NURS 052L.

Intermediate nursing theory and concepts to promote and maintain safe and effective health care. Critical thinking and the nursing process in the intermediate care of patient responses to physiological, psychosocial and psychiatric-mental health conditions. Total of 18 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

NURS 053 ADVANCED MEDICAL – SURGICAL NURSING

3 units

Prerequisites: All of the following: NURS 052, 052L, 052S.

Corequisites: NURS 053L, 053S.

Advanced nursing theory and concepts to promote and maintain safe and effective health care with culturally diverse patients. Integrate professional nursing roles of clinician, teacher, leader and advocate while demonstrating critical thinking and nursing process in the advanced care of patient response to physiological and psychosocial health conditions. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

NURS 053L ADVANCED MEDICAL – SURGICAL NURSING – CLINICAL

5 units

Corequisite: NURS 053.

Application of advanced nursing theory and concepts to promote and maintain safe and effective health care with culturally diverse patients. Integrate the professional nursing roles of clinician, teacher, leader and advocate while demonstrating critical thinking and nursing process in the advanced care of patient response to physiological and psychosocial health conditions. **Pass/no pass** grading. Total of 270 hours laboratory.

Transfer Credit: CSU

Grade Mode: A, P

NURS 053S ADVANCED NURSING – SEMINAR

1 unit

Prerequisites: NURS 052A, 052L, 052S, 042, and 042L.

Corequisites: NURS 053 and NURS 053L.

Advanced nursing theory and concepts to promote and maintain safe and effective health care. Critical thinking and the nursing process in the advanced care of client responses to physiologic and psychosocial health conditions of clients across the lifespan. Total of 18 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

NURS 103 NURSING ASSISTANT

5 units

Prerequisite: Completion of high school 10th grade; minimum age of 16.

Introduction to basic principles of nursing, including the role of the certified nurse assistant on a health care team; gross anatomy and medical terminology; ethics and communication; basic procedural skills with emphasis on gerontology. **Six weeks. Pass/no pass** grading. **For** students accepted to the Vocational Nursing program but open to all students. Total of 54 hours lecture and 108 hours laboratory.

Grade Mode: A, P

NURS 108A NURSING SKILLS LABORATORY—VN**1 unit****Corequisites:** *NURS 125, 125L and 122.***Enrollment Limitation:** *Enrollment in the Licensed Vocational Nursing Program.*

Foundational nursing procedural skills, therapeutic communication, and documentation skills. Development and laboratory practice of nursing procedural skills correlated with NURS 125 and 125L. Utilization of the nursing process in demonstrating critical elements of procedures. **Pass/no pass** grading. Total of 54 hours laboratory.

Grade Mode: A, P**NURS 108B NURSING SKILLS LABORATORY—VN****1 unit****Prerequisite:** *NURS 125, 125L, 108A, and 122.***Corequisites:** *NURS 126, 126L, and 124.***Enrollment Limitation:** *Enrollment in the Licensed Vocational Nursing Program.*

Continued development and progression in the practice of procedural skills associated with NURS 126 and 126L. Application of the nursing process in the performance of complex technical skills. **Pass/no pass** grading. **Short term class.** Total of 54 hours laboratory.

Grade Mode: A, P**NURS 122 MEDICATION ADMINISTRATION FOR VOCATIONAL NURSES—THEORY****3 units****Prerequisites:** *MATH 400B or MATH 402.***Corequisites:** *NURS 125, 125L, and 108A.***Enrollment Limitation:** *Enrollment in the Vocational Nursing Program.*

Principles of medication administration, classification of drugs, drug actions and side effects. Role and responsibilities of the vocational nurse in the interpretation of drug orders, dosage calculation, and administration of medications. Calculation of intravenous rates and management of intravenous fluids for the vocational nurse. Total of 54 hours lecture.

Grade Mode: L, A**NURS 123A ADMINISTRATION OF MEDICATIONS****2 units****Prerequisite:** *MATH 401C or 402.***Corequisites:** *NURS 108A, 125, 125L.*

Introduction to principles of medication administration, classification of drugs, drug actions, and side effects. Role and responsibilities of the vocational nurse in the interpretation of drug orders, dosage calculation, and administration of medications. **Recommended** Pre-Algebra math skill; be able to compute basic math and do metric system conversions. Total of 36 hours lecture.

Grade Mode: L, A**NURS 123B ADMINISTRATION OF MEDICATIONS****2 units****Prerequisite:** *NURS 123A.***Corequisites:** *NURS 126, 126L.*

Continued studies in the administration of medications, classification of drugs, drug actions and side effects. Role and responsibilities of the vocational nurse in administration of medications. Calculation of intravenous rates and management of intravenous fluids for the vocational nurse. Total of 36 hours lecture.

Grade Mode: L, A**NURS 124 MENTAL HEALTH NURSING FOR VOCATIONAL NURSES****2 units****Prerequisites:** *NURS 125, 125L, 108A, and 122.***Corequisites:** *NURS 126, 126L, and 108B.***Enrollment Limitation:** *Enrollment in the Vocational Nursing Program.*

Mental health nursing theory and concepts to promote and maintain safe, developmentally appropriate health care for culturally diverse psychiatric - mental health clients across the lifespan. Integrate vocational nursing responsibilities of data collection, planning interventions, reporting and documentation. Utilization of nursing process in the vocational nurse's care of client response to psychiatric-mental health conditions. Total of 36 hours lecture.

Grade Mode: L, A**NURS 125 FUNDAMENTALS OF VOCATIONAL NURSING—THEORY****5 units****Prerequisites:** *NURS 103, NUTR 011 or 125; PSYC 102 or 024; and enrollment in or completion of PYSO 100.***Corequisites:** *NURS 108A, 123A, 125L, 125S.***Enrollment Limitation:** *Enrollment in the Vocational Nursing Program.*

Introduction to the fundamentals of vocational nursing. Theory common to the care of adult medical/surgical clients. Introduction to the components of the nursing process. Concepts of communication in a multicultural environment. Total of 90 hours lecture.

Grade Mode: L, A**NURS 125L FUNDAMENTALS OF VOCATIONAL NURSING—CLINICAL****5 units****Prerequisite:** *NURS 137.***Corequisites:** *NURS 108A, 123A, 125.*

Introduction and application of basic vocational nursing skills. Application of nursing theory and the nursing process to the care of individuals in hospitals and community agencies. **Pass/no pass** grading. Total of 270 hours laboratory.

Grade Mode: A, P

NURS 125S FUNDAMENTALS OF VOCATIONAL NURSING—SEMINAR

1 units

Corequisites: *NURS 125, 125L, 108A, 123A.*

Introduction to the concepts of communication necessary to the care of adult and geriatric medical, surgical, and psychiatric clients at the beginning vocational level. Total of 18 hours lecture.

Grade Mode: L, A

NURS 126 INTERMEDIATE VOCATIONAL NURSING—THEORY

5 units

Prerequisites: *NURS 108A, 125, 125L, and 122.*

Corequisites: *NURS 126L, 108B, and 124.*

Enrollment Limitation: *Enrollment in the Vocational Nursing Program.*

Progression in vocational nursing. Elaboration on concepts of safe care of medical/surgical clients. Progression in the vocational nurse utilization of nursing process for more complex client problems. Further concepts of cultural proficiency, therapeutic communication, and client advocacy. Total of 90 hours lecture.

Grade Mode: L, A

NURS 126L INTERMEDIATE VOCATIONAL NURSING—CLINICAL

5 units

Corequisites: *NURS 126.*

Application of nursing theory and skills to the care of individuals experiencing complex medical/surgical conditions. Progressive use of the nursing process. **Pass/no pass** grading. Total of 270 hours laboratory.

Grade Mode: A, P

NURS 126S INTERMEDIATE VOCATIONAL NURSING – SEMINAR

1 unit

Prerequisites: *All of the following: NURS 108A, 123A, 125, 125L, 125S.*

Corequisites: *NURS 126, 126L, 108B, 123B.*

Continuation and progression in vocational nursing theory and concepts common to the care of complex adult medical/surgical clients at the intermediate vocational nursing level. Total of 18 hours lecture.

Grade Mode: L, A

NURS 127 ADVANCED VOCATIONAL NURSING—THEORY

6 units

Prerequisites: *All of the following: NURS 108B, 124, 126, 126L.*

Corequisite: *NURS 127L.*

Continuation and progression in vocational nursing. Nursing care of maternal-newborn, pediatric, and medical-

surgical clients. Concepts of emergency and disaster nursing, community nursing, leadership and supervision. Current trends in vocational nursing, legal, ethical issues, career opportunities and job application. Preparation for vocational nursing licensure examination. Total of 108 hours lecture.

Grade Mode: L, A

NURS 127L ADVANCED VOCATIONAL NURSING—CLINICAL

4 units

Corequisite: *NURS 127.*

Application of nursing theory to the care of maternal/child, pediatric, and adult medical/surgical clients. Integration of nursing process into the role of vocational nurse leader. Role of the vocational nurse in an emergency setting. **Twelve weeks. Pass/no pass** grading. Total of 216 hours laboratory.

Grade Mode: A, P

NURS 137 FOUNDATION PHARMACOLOGY

1 unit

Corequisites: *NURS 050, 050L, and 050S.*

Enrollment Limitation: *Admission to Registered Nursing Program.*

Introduction to foundational pharmacological principles and dosage calculation that relate the concepts of patient-centered care, teamwork and collaboration, evidence-based practice, safety, informatics, and professionalism to the care of patients receiving medication across the developmental spectrum. Total of 18 hours of lecture.

Grade Mode: L

NURS 138 PHARMACOLOGY: PROCESS AND PROBLEMS

1 unit

Prerequisite: *NURS 137.*

Corequisites: *NURS 050, 050L, and 050S.*

The role of the nurse in medication administration. Focus on drug information to enhance safe and effective use of over-the-counter and prescription medications. Current issues related to drug therapy explored. Total of 18 hours lecture.

Grade Mode: L, A

NURS 139 INTERMEDIATE CLINICAL PHARMACOLOGY

2 units

Focus on effective pharmacological and parenteral treatments to alleviate illness, relieve pain, and facilitate healing. Individualized care plan based on patient values, clinical experience and evidence-based practice. Demonstration of effective use of strategies to reduce risk of harm when administering or evaluating medication. Total of 36 hours lecture.

Grade Mode: L, A

NURS 200 NURSING LABORATORY

1 unit

Prerequisite: *Enrollment or awaiting readmission in a Nursing, Emergency Medical Technology or Radiologic Technology course.*

Development of nursing skills and concepts in a laboratory setting. **Pass/no pass** grading. Total of 54 hours laboratory.

Grade Mode: A, P

NURS 201 NURSING BOOT CAMP

1.5 units

Enrollment Limitation: *Acceptance into PCC Nursing Program.*

Foundational skills and concepts will prepare the new nursing student for the rigors of the nursing program and the development of the ability to provide patient-centered, collaborative, evidence-based, safe nursing care to individuals while maintaining professional and ethical standards. Vital information related to nursing school success strategies, math skills, and the required competencies for the nursing program are included. Students will have the opportunity to practice newly acquired cognitive and psycho-motor skills. This course is **strongly** recommended for students beginning the PCC Nursing Program at the start of the next academic semester. **Pass/no pass** grading. Total of 18 hours of lecture and 27 hours of laboratory.

Grade Mode: P

NURS 202 NURSING SKILLS ENRICHMENT

3 units

Prerequisite: *Either NURS 050, 050L, 137, 138 and NURS 050S; or NURS 051A, 051L, and 051S; or NURS 040, 040L and 051S; or NURS 041, 041L, and 051S; or NURS 042, 042L, and 052S; or NURS 052A, 052L, and 052S; or NURS 053, 053L, and 053S.*

Enrollment Limitation: *Acceptance into PCC Nursing Program.*

Development and improvement of nursing knowledge, skills, and attitudes in a supervised clinical setting, based on self-evaluation and improvement planning. Focus for this course is on patient-centered care, teamwork and collaboration, evidence-based practice, safety, informatics, and professionalism. **Pass/no pass** grading. Total of 162 hours laboratory.

Grade Mode: P

NURS 210 NURSING ROLE TRANSITION

2 units

Prerequisite: *Acceptance into Licensed Vocational Nurse Based Registered Nursing program.*

Nursing concepts, judgment, skills, and practices related to the role transition of the licensed vocational nurse to

the registered nurse. Total of 27 hours lecture and 27 hours laboratory.

Grade Mode: L, A

NURS 211 BASIC CARDIAC DYSRHYTHMIAS

1 unit

Provides nurses, paramedics, and other health care providers with an opportunity to become proficient in interpreting and applying basic cardiac dysrhythmias in clinical practice. **Pass/no pass** grading. Total of 18 hours lecture.

Grade Mode: A, P

NURS 213 INTRAVENOUS THERAPY AND BLOOD WITHDRAWAL

1 unit

Prerequisites: *NURS 051, 051L; or NURS 126 and 126L.*

This course covers basic concepts, principles, and techniques of I.V. therapy and blood withdrawal. Emphasis is on the acquisition of venipuncture and blood withdrawal skills. Course approved by the BRN and BVNPTE for continuing education hours. **Pass/no pass** grading. **Short term class.** Total of 9 hours lecture and 27 hours laboratory.

Grade Mode: A, P

NUTRITION

(Health Sciences Division)

NUTR 011 HUMAN NUTRITION

3 units

Nutrition throughout the life cycle. Relationship of diet to health, physical activity and body functions. Nutritional value of foods, minerals and vitamins. Total of 54 hours lecture and 18 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: NUTR 110*

Grade Mode: L, A, P

NUTR 012 PRINCIPLES OF FOOD SCIENCE

3 units

Application of food science principles with emphasis on ingredient function and interaction, food preparation techniques, sensory evaluation standards, food safety and sanitation, and nutrient composition of food. Total of 54 hours lecture and 18 hours laboratory.

*Transfer Credit: CSU. *C-ID: NUTR 120*

Grade Mode: L, P

NUTR 025 NUTRITION FOR SPORT, EXERCISE, AND HEALTH

3 units

Principles of nutrition are studied and applied to the athlete and active individuals. Includes macro and micro nutrient intakes, hydration, pre- and post-event food

*Course Identification Numbering System (C-ID)

choices, supplements, body composition, and weight loss/gain. This course also examines the cultural, sociological, and psychological influences related to nutrition, fitness, and athletic achievement. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, P

PARALEGAL STUDIES

(Business and Engineering Technology Division)

PLGL 134 INTRODUCTION TO PARALEGAL STUDIES

3 units

The career as a paralegal. Relationship of attorney and paralegal in decision making and systems procedures. Introduction to law; composition, location and jurisdiction of courts; legal terminology; bibliography, social forces and effect of law. Total of 54 hours lecture.

Grade Mode: L, A

PLGL 135A WILLS, TRUSTS, PROBATE ADMINISTRATION

3 units

Prerequisite: *Enrollment in or completion of PLGL 134.*

Overview of property, wills and general estate planning; overview of probate and probate court, guardianships, conservatorships, elder law, tax-related issues, probate alternatives; probate litigation. Total of 54 hours lecture.

Grade Mode: L, A, P

PLGL 135B WILLS, TRUSTS, PROBATE ADMINISTRATION

3 units

Prerequisite: *PLGL 135A.*

Probate administration and mechanics, summary administration, family allowance and homestead, estate planning and use of trusts. Total of 54 hours lecture.

Grade Mode: L, A, P

PLGL 136 PROPERTY LAW, BANKRUPTCY AND CREDITORS RIGHTS

3 units

Prerequisite: *Enrollment in or completion of PLGL 134.*

Law of personal property, real property, joint ownership, leases, deeds; drafting problems in real estate transactions; systems of recording, search of public documents, bankruptcy laws and forms; creditors' rights, debtors' exemptions and secured transactions. Total of 54 hours lecture.

Grade Mode: L, A, P

PLGL 137 LEGAL WRITING AND DRAFTING

3 units

Prerequisite: *PLGL 134 or 145A.*

Advanced legal drafting and writing; special research and

projects. Preparation of specific court papers and general legal papers. Total of 54 hours lecture.

Grade Mode: L, A, P

PLGL 138 PARALEGAL STUDIES FIELD PRACTICE

4 units

Prerequisite: *Maintain enrollment in 7 units or more including field practice and in Paralegal Studies curriculum.*

Supervised field experience or employment in legal office leading to training in systems approach for paralegals (legal assistants). Total of 360 hours field practice.

Grade Mode: L, A, P

PLGL 139 TORT LAW AND CLAIMS INVESTIGATION

3 units

Prerequisite: *Enrollment in or completion of PLGL 134.*

Intentional torts and negligence, including insurance claims procedures; evaluation of personal injury claims and pleadings used in law offices either in settlement or litigation. Total of 54 hours lecture.

Grade Mode: L, A, P

PLGL 140 FAMILY LAW AND DISSOLUTION PROCEDURES

3 units

Prerequisite: *Enrollment in or completion of PLGL 134.*

Law and procedure relative to marriage, dissolution, adoption and community property. Total of 54 hours lecture.

Grade Mode: L, A, P

PLGL 141 CIVIL AND CRIMINAL EVIDENCE

3 units

Prerequisite: *Enrollment in or completion of PLGL 134.*

Rules of civil and criminal evidence, admissibility of evidence in court, types of evidence, hearsay evidence and exceptions, expert testimony, and scientific evidence. Total of 54 hours lecture.

Grade Mode: L, A, P

PLGL 142 LAW OFFICE PROCEDURES AND ETHICS

3 units

Prerequisite: *Enrollment in or completion of PLGL 134.*

Basic objectives of law office management procedures. Coordination of operational skills in a law office. Ethics of the legal profession and the judiciary. Total of 54 hours lecture.

Grade Mode: L, A, P

PLGL 143 WORKER'S COMPENSATION LAW

3 units

Background of Worker's Compensation Law. Relevant statutory and case law, substantive and procedural issues including compensability, benefit structure and tort law relationships of Worker's Compensation. Total of 54 hours lecture.

Grade Mode: L, A, P

PLGL 145A LEGAL RESEARCH**3 units****Prerequisite:** *Enrollment in or completion of PLGL 134.*

Introduction to the technical skills of legal research through the use of a case digest, interpretation of statutes, Shepardizing authorities, and prioritizing authorities. Total of 54 hours lecture.

Grade Mode: L, A, P**PLGL 145B COMPUTER AIDED LEGAL RESEARCH****1 unit****Prerequisite:** *Enrollment in or completion of PLGL 134 and 145A.*

On-line legal research using online legal databases and other information available. Composing queries and re-searching case law, statutes, and legal periodicals. Total of 9 hours lecture and 27 hours laboratory.

Grade Mode: L, A, P**PLGL 146 COMPUTER USE FOR THE LAW OFFICE****2 units****Prerequisite:** *PLGL 134.*

Use of software programs in the law office. Applications include software for word processing, Judicial Council forms, jury instruction preparation, legal calendaring, case management, trial preparation, time keeping, billing, and accounting. **Recommended** basic word processing skills. Total of 36 hours lecture and 18 hours laboratory.

Grade Mode: L, A, P**PLGL 147 INTRODUCTION TO E-DISCOVERY****2 units****Prerequisite:** *PLGL 134.*

Introduces E-Discovery, the E-Discovery Reference Model ("EDRM"), and the software used in law firms and legal departments for document review. Current trends in the Federal Rules of Civil Procedure and Federal Rules of Criminal Procedure, social media and cloud computing, discovery issues and the practical application of these rules. Intended for students in the Paralegal Studies Program or in the paralegal profession, but open to all students. 36 hours lecture and 18 hours laboratory.

Grade Mode: L, P**PLGL 148 IMMIGRATION LAW****3 units****Prerequisite:** *Enrollment in or completion of PLGL 134.*

Historical background; administration of immigration law; citizenship and nationality; immigration preference system; non-immigrants; visas; refugees and asylum. Total of 54 hours lecture.

Grade Mode: L, A, P**PLGL 150 PARALEGAL STUDIES GRADUATE SEMINAR****1 unit****Prerequisite:** *Enrollment in or completion of final semester of Paralegal Studies courses.*

Designed to help Paralegal Studies students bridge the gap between the educational institution and the workplace. Resume writing, interviewing for employment, and professional networking. Intended for students in the last semester of the Paralegal Studies Program and earning the Certificate of Achievement. Total of 18 hours lecture.

Grade Mode: A, P**PERSONAL HEALTH CARE ASSISTANT****(Health Sciences Division)****PHCA 100 PERSONAL HEALTH CARE AIDE****2 units****Enrollment Limitation:** *Completion of high school 10th grade; minimum age of 16.*

Prepares students to provide or support activities of daily living, personal care, and homemaker services to elderly and disabled individuals needing assistance to remain safely and independently in their own home or in an assisted living facility. Topics include communication skills, maintenance of a healthy environment, procedures for emergencies, physical, emotional, and developmental characteristics of the patients served, personal hygiene, safe transfer techniques, and basic nutrition. Total of 108 hours laboratory.

Grade Mode: A, P**PHILOSOPHY****(Social Sciences Division)****PHIL 001 INTRODUCTION TO PHILOSOPHY****3 units**

A survey of the main areas of philosophy, including metaphysics, epistemology, ethics, political philosophy, and philosophy of religion. Introduction to philosophical methods, including logical and conceptual analysis. Interpretation of historical and contemporary philosophical texts. Evaluation of philosophical problems, concepts, and arguments. Construction and defense of philosophical arguments in oral and written form. **No credit** if taken after PHIL 001H. Total of 54 hours lecture.

*Transfer Credit: CSU; UC credit limitations. See counselor.***C-ID: PHIL 100***Grade Mode:** L, P

*Course Identification Numbering System (C-ID)

PHIL 001H HONORS INTRODUCTION TO PHILOSOPHY

3 units

Enrollment Limitation: *Acceptance into the Honors program.*

Introduction to the most troublesome questions: meaning, existence, truth, reasoning, perception, intuition, morality, god, self, mind. Appropriate readings. This enriched course is designed for the Honors Program allowing more student directed discussions and more extensive writing assignments. **No credit** if taken after PHIL 001. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: PHIL 100*

Grade Mode: L

PHIL 003 ETHICS

3 units

An analysis from the philosophical point of view of the nature of morality and moral judgments; study of the major ethical systems; theories of conduct; theories of value; the moral virtues; science and morality; ethical relativism. Particular issues examined include the nature of moral actions; the ground for moral obligation; and the relation between morality, happiness, and rationality. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: PHIL 120*

Grade Mode: L, P

PHIL 007 CONTEMPORARY MORAL PROBLEMS

3 units

Nature of ethical value judgments. Concepts of choice, obligations, moral standards, and types of ethical theory. Analysis of such concepts as justice, freedom, the state. Various types of political theory. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

PHIL 008 PHILOSOPHY AND HUMANNESS

3 units

The essence of human nature: reason, desire, work, freedom and organism; some deficiencies in human nature: sin, ignorance, neurosis, alienation; means for changing human nature: redemption, education, therapy, social reconstruction. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, P

PHIL 020 INDEPENDENT STUDY

1 unit

Enrollment Limitation: *Permission of department instructor and division dean.*

Individual research projects; emphasis on library research

and preparation of research papers. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, P

PHIL 020A HISTORY OF ANCIENT PHILOSOPHY

3 units

Beginnings of Western philosophy and science in Greece, including philosophers such as Socrates, Plato, and Aristotle, and Hellenistic schools of thought, developments to St. Thomas Aquinas, and theories of the late Middle Ages. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, P

PHIL 020B HISTORY OF MODERN PHILOSOPHY

3 units

Philosophical systems of the Renaissance; the scientific revolution; rationalism in Descartes, Spinoza and Leibniz; empiricism in Locke, Berkeley and Hume; Kant and post-Kantian developments. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, P

PHIL 025 INTRODUCTION TO CRITICAL THINKING

3 units

Prerequisite: *ENGL 001A, 001AH, or 001AS.*

An introduction to critical thinking skills and techniques of critical analysis in written form. Course will include applications of critical reasoning skills in everyday situations and seek to develop the ability to integrate the principles of critical thinking with the techniques of effective written argument. A total of 6,000 to 8,000 words will be required during the semester in a variety of written assignments. **No credit** if taken after PHIL 025H. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

PHIL 025H HONORS CRITICAL THINKING

3 units

Prerequisite: *ENGL 001A, 001AH, or 001AS.*

Enrollment Limitation: *Acceptance into the Honors program.*

An introduction to critical thinking skills and techniques of critical analysis in written form. Course will include applications of critical reasoning skills in everyday situations and seek to develop the ability to integrate the principles of critical thinking with the techniques of effective written argument. A total of 6,000 to 8,000 words will be required during the semester in a variety of written assignments. This enriched course is designed for the Honors Program allowing more student-directed discussions and more extensive writing assignments. **No credit** if taken after PHIL 025. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

**Course Identification Numbering System (C-ID)*

PHIL 030 LOGIC**3 units**

Elementary thought processes, both deductive and inductive, emphasis on definition, verification, evidence, validity, forms of argument and of fallacious reasoning. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, P

PHIL 031 CONTEMPORARY CHICANO PHILOSOPHY**3 units**

Survey of Mexican philosophy; emphasis on contemporary developments; implications of Mexican thought for the Mexican-American. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

PHIL 033 INTRODUCTION TO SYMBOLIC LOGIC**3 units**

Introduction to the principles of valid deductive reasoning; elements of symbolic logic; sentential and quantificational logic; forms of reasoning; structure of language. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, P

PHIL 037 PHILOSOPHY OF RELIGION**3 units**

Examines enduring questions in the philosophy of religion, such as the concept of God, arguments for the existence of God, the nature of religious experience, whether there is an afterlife, the relation between faith and reason, the problem of evil, whether belief in miracles is rationally justified, problems surrounding divine foreknowledge and human freedom, and implications of the diversity of religious belief. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, P

PHOTOGRAPHY

(Visual Arts and Media Studies Division)

PHOT 010 HISTORY OF PHOTOGRAPHY**3 units**

Historical trends of the medium from its inception to the present, including historical context, technical innovations and aesthetic concerns. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

PHOT 021 INTRODUCTION TO BLACK AND WHITE PHOTOGRAPHY**3 units**

Introduction to black and white photography as a form of visual communication: cameras, film, film processing,

darkroom printing, composition, photographic genre, concept development, professionalism and critique. Genres include documentary, fashion, landscape, portraiture staged, still life, and street photography with an emphasis on analog photography. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

PHOT 022A LARGE FORMAT PHOTOGRAPHY**3 units**

Prerequisites: PHOT 021 and PHOT 030.

Recommended Preparation: PHOT 031.

Introduction to View Camera as a form of visual communication: 4 x 5 black and white and color film, 4 x 5 film processing, advanced darkroom and presentation technique, fiber printing, Introduction to studio lighting for product, scanning for 4 x 5 film, digital modification and preparation for output of large format prints, concept development and critique. Photographic genres included in course: advertisement, architecture, landscape and fine art. Total of 36 hours lecture and 72 hours of laboratory.

Transfer Credit: CSU

Grade Mode: L, A, P

PHOT 030 INTRODUCTION TO DIGITAL IMAGE EDITING**3 units**

Prerequisite: PHOT 021 or placement based on the Photography assessment process.

Recommended Preparation: PHOT 023A and either 024A or 024B.

Introduction to artistic image editing using industry standard digital image editing software for photographers, illustrators and graphic designers. Techniques to scan, edit, retouch, paint, mask, manipulate, and output digital imagery. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

PHOT 031 BEGINNING DIGITAL PHOTOGRAPHY**3 units**

Recommended Preparation: PHOT 021 and PHOT 030.

Introduction to digital photography as a form of visual communication: DSLR cameras, digital image editing and management, digital output for print and screen, composition, professionalism, photographic genre, concept development and critique. Genres include documentary, fashion, landscape, portraiture staged, still life, and street photography with an emphasis on digital photography. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A, P

PHOT 033 PORTRAIT PHOTOGRAPHY**3 units****Prerequisite:** *PHOT 030 and either PHOT 021 or 031.*

Exploration of the fundamentals of portrait photography in the context of a variety of locations. Emphasis on planning, interpreting, and presenting a portrait photographically. Medium format film cameras, advanced printing techniques as well as in studio lighting set-ups using hot lights, strobes, electronic metering will be covered. Total of 36 hours lecture and 72 hours laboratory.

*Transfer credit: CSU; UC***Grade Mode:** L, A, P**PHOT 040 FASHION PHOTOGRAPHY****3 units****Prerequisite:** *PHOT 030 and either PHOT 021 or PHOT 031.*

Commercially oriented course with assignments covering fashion and fashion specific product photography in the studio and on location to produce a photograph that sells an idea, product, or service. Fundamentals of studio photography including strobes, electronic metering, digital SLR and lighting for fashion. Business practices in commercial and editorial photography will be discussed. Students are expected to become visually and technically competent with artificial light sources in the studio. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU***Grade Mode:** L, A, P**PHOT 130 ADVANCED DIGITAL IMAGE EDITING****3 units****Prerequisite:** *PHOT 030.*

Advanced concepts and techniques in digital image editing for artists. An in depth examination of producing complex masks and selections from existing channel information. Students will explore many of the advanced features of industry standard digital image editing software. Emphasis is on students incorporating advanced digital image editing techniques into their existing art practice. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A**PHOT 132 ADVANCED DIGITAL PHOTOGRAPHY****3 units****Prerequisites:** *PHOT 030 and PHOT 031, or placement based on the Photography assessment process.*

Advanced practices in digital photography. Studio capture techniques for product and portrait photography. Advanced principles of color management, software-based digital image editing and compositing of images, and printing. Emphasis on the intersection of professional photographic technique and digital image editing. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A**PHOT 135 ADVANCED PHOTOGRAPHY****3 units****Prerequisites:** *One of the following: 1) PHOT 023A and PHOT 022A or 024A or 024B; OR 2) portfolio presentation; OR 3) placement based on the Photography assessment process.*

Creation of a portfolio leading to job training or fine arts school. Black and white, color, digital and studio and location photography with concept and technique both emphasized. Beginning research into editorial, commercial or fine arts job market. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A**PHOT 136 VIDEO FOR PHOTOGRAPHERS****3 units****Prerequisites:** *PHOT 021 or JOUR 021.***Recommended Preparation:** *PHOT 031 or PHOT 023A.*

Introduction for photographers to the technical skills and conceptual fundamentals to produce video content. Exploration of current video project types created by professional still photographers. Examination of the similarities and differences between still photography and motion pictures. Introduction to basic video production procedures. Emphasis on fundamental technical knowledge, conceptualization, camera operation, sound recording, lighting, editing and delivery techniques for video. Projects may include event documentation, creating a companion video for a series of still photographs, and/or creating a short narrative video. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A**PHOT 140 PROFESSIONAL PRACTICES FOR PHOTOGRAPHERS****3 units****Prerequisites:** *One of the following: PHOT 030, PHOT 031, PHOT 022A, PHOT 024A, PHOT 033 or PHOT 040.*

Introduction to principles and practices within the photography field for hire or exhibition to empower students to identify and achieve professional photographic objectives. Topics include how to obtain preparatory work experience, getting gallery representation, establishing a photographic business, basic financial practices, and legal issues. **Recommended** basic word processing and spreadsheet skills. Total of 54 hours lecture.

Grade Mode: L, A, P**PHOT 171A EXPLORING TOPICS IN PHOTOGRAPHY****3 units****Exploratory course:** *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 54 hours lecture.

Grade Mode: L, A, P

PHOT 171B EXPLORING TOPICS IN PHOTOGRAPHY**2 units****Exploratory course:** *Specific topic identified in Schedule of Classes.*

Lecture, discussion, and lab focusing on topics of current and general interest. Total of 36 hours lecture.

Grade Mode: L, A, P**PHOT 171C EXPLORING TOPICS IN PHOTOGRAPHY****1 unit****Exploratory course:** *Specific topic identified in Schedule of Classes.*

Course focuses on topics of current and general interest. Total of 18 hours lecture and 18 hours laboratory.

Grade Mode: L, A, P**PHYSICAL SCIENCE****(Natural Sciences Division)****PHSC 002 SCIENTIFIC METHOD AS CRITICAL THINKING****3 units****Prerequisite:** ENGL 001A.

Written expression and analysis of ideas, arguments and issues in the Physical Sciences. Instruction in critical thinking, inductive and deductive reasoning, and the scientific method. Particular emphasis on compositional expression necessary in developing a complex scientific argument; an interdisciplinary course. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, A, P**PHSC 003 PHYSICAL SCIENCES****3 units****Prerequisite:** *Eligibility for MATH 131 or higher.*Basic principles of physics and chemistry and their applications to modern daily life with a primarily conceptual approach. Emphasis on critical thinking skills and general methods of scientific inquiry. **Recommended** for students in the California State Teacher's Preparation Program and other appropriate non-sciences majors but open to all qualified students. Total of 54 hours lecture.*Transfer Credit: CSU; UC credit limitations. See counselor.***C-ID: CHEM 140 (WITH PHSC 003L) or PHYS 140 (WITH PHSC 003L)***Grade Mode:** L, A, P**PHSC 003L LABORATORY FOR PHYSICAL SCIENCE****1 unit****Prerequisite:** *Enrollment in or completion of PHSC 003.*

Laboratory investigation of the basic principles of physics

and chemistry and their applications to modern daily life with a primarily conceptual approach, with emphasis on critical thinking skills and general methods of scientific inquiry. **Recommended** for students in the California State Teacher Preparation Program and other appropriate non-sciences majors. Total of 54 hours laboratory.*Transfer Credit: CSU; UC credit limitations. See counselor.***C-ID: CHEM 140 (WITH PHSC 003) or PHYS 140 (WITH PHSC 003)***Grade Mode:** L, A, P**PHSC 071A EXPLORING TOPICS IN PHYSICAL SCIENCE****3 units****Exploratory course:** *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 54 hours lecture.

*Transfer Credit: CSU***Grade Mode:** L, A**PHSC 071B EXPLORING TOPICS IN PHYSICAL SCIENCE****1 unit****Exploratory course:** *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 18 hours lecture.

*Transfer Credit: CSU***Grade Mode:** L, A**PHSC 071C EXPLORING TOPICS IN PHYSICAL SCIENCE****1 unit****Exploratory course:** *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 18 hours lecture and 18 hours laboratory.

*Transfer Credit: CSU***Grade Mode:** L, A**PHSC 171A EXPLORING TOPICS IN PHYSICAL SCIENCE****3 units****Exploratory course:** *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest. Total of 54 hours lecture.

Grade Mode: L, A**PHSC 171B EXPLORING TOPICS IN PHYSICAL SCIENCE****1 unit****Exploratory course:** *Specific topic identified in Schedule of Classes.*

**Course Identification Numbering System (C-ID)*

Lecture focusing on topics of current and general interest.
Total of 18 hours lecture.

Grade Mode: L, A

PHSC 171C EXPLORING TOPICS IN PHYSICAL SCIENCE

1 unit

Exploratory course: *Specific topic identified in Schedule of Classes.*

Lecture focusing on topics of current and general interest.
Total of 18 hours lecture and 18 hours laboratory.

Grade Mode: L, A

PHYSICS

(Natural Sciences Division)

PHYS 001A PHYSICS FOR SCIENTISTS AND ENGINEERS I: MECHANICS

5 units

Prerequisite: MATH 005A or MATH 005AH.

Calculus-based study of classical mechanics, including unit systems, particle kinematics, Newton's laws of motion, work and energy, linear and angular momentum, and rigid-body rotation and equilibrium. Total of 72 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: PHYS 205; PHYS SEQ 200S (WITH PHYS 001B, 001C, 001D)*

Grade Mode: L, P

PHYS 001B GENERAL PHYSICS

5 units

Prerequisites: PHYS 001A and MATH 005A.

Calculus-based study of gravitation, fluid mechanics, oscillations and waves, and thermodynamics. Total of 72 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: PHYS SEQ 200S (WITH PHYS 001A, 001C, 001D)*

Grade Mode: L, A, P

PHYS 001C GENERAL PHYSICS

5 units

Prerequisites: PHYS 001B and MATH 005B.

Calculus-based study of electricity and magnetism, and geometrical and physical optics. Total of 72 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: PHYS 210; PHYS SEQ 200S (WITH PHYS 001A, 001C, 001D)*

Grade Mode: L, A, P

PHYS 001D GENERAL PHYSICS

5 units

Prerequisites: PHYS 001C and MATH 005C.

Calculus-based study of introductory modern physics, including the theory of relativity, basic principles of quantum mechanics, elementary atomic, molecular, solid state, nuclear, and particle physics. Total of 72 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: PHYS SEQ 200S (WITH PHYS 001A, 001B, 001C)*

Grade Mode: L, A, P

PHYS 002A GENERAL PHYSICS

4 units

Prerequisite: *One of the following: MATH 131 or 133B or 134B or 150.*

Recommended preparation: MATH 007A.

Algebra- and trigonometry-based study of classical mechanics and thermodynamics. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: PHYS 105; PHYS SEQ 100S (WITH PHYS 002B)*

Grade Mode: L, A, P

PHYS 002B GENERAL PHYSICS

4 units

Prerequisite: PHYS 002A.

Algebra- and trigonometry-based study of electricity, magnetism, special relativity, atomic and nuclear physics, and elementary particles. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: PHYS 110; PHYS SEQ 100S (WITH PHYS 002A)*

Grade Mode: L, A, P

PHYS 010 DESCRIPTIVE INTRODUCTION TO PHYSICS

3 units

Prerequisite: MATH 131 or 150.

Application of physics to modern life with minimum of mathematical emphasis. **No credit** if taken after any other college physics. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

PHYS 010L DESCRIPTIVE PHYSICS IN THE LABORATORY

1 unit

Prerequisite: Enrollment in or completion of PHYS 010.

Laboratory investigations of physical principles with a minimum of mathematical emphasis. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

**Course Identification Numbering System (C-ID)*

PHYS 020 INDEPENDENT STUDY

2 units

Prerequisite: Enrollment in or completion of any college physics course.

Faculty-guided student research. Each topic includes library research, design and execution of the experiments and the preparation of a summary research report. Total of 108 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

PHYS 031A GENERAL PHYSICS

5 units

Prerequisite: MATH 005A.

Classical mechanics and thermal physics. For life sciences majors but open to all qualified students. Total of 72 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

PHYS 031B GENERAL PHYSICS

5 units

Prerequisites: PHYS 031A and MATH 005B.

Electricity and magnetism, optics, and modern physics.

Recommended enrollment in or completion of MATH 005C.

For life sciences majors but open to all qualified students.

Total of 72 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC credit limitation. See counselor.

Grade Mode: L, A

PHYSIOLOGY

(Natural Sciences Division)

PYSO 001 HUMAN PHYSIOLOGY

4 units

Prerequisites: ANAT 025 and CHEM 002A.

Introduction to human cellular and organ physiology, human genetics and embryology, current topics in health.

Recommended sophomore standing. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC. *C-ID: BIOL 120B

Grade Mode: L, A, P

PYSO 100 BASIC PHYSIOLOGY AND ANATOMY

3 units

Fundamentals of human physiology and anatomy. Structure and function of tissues, organs and organ systems. Emphasis on medical relationships. **No credit** if taken after ANAT 025, PYSO 001, 002A or 126A. **For** majors in medical assisting and vocational nursing, but open to all qualified students. Total of 54 hours lecture and 36 hours laboratory.

Grade Mode: L, A, P

POLITICAL SCIENCE

(Social Sciences Division)

POLS 001 INTRODUCTION TO AMERICAN GOVERNMENT AND POLITICS

3 units

Introduction to American government and politics incorporating California state and local history, constitution, institutions and policies. POLS 001 and 002 usually required for advanced political science courses. **No credit** if taken after AMERI 005. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: POLS 110

Grade Mode: L, A, P

POLS 002 COMPARATIVE GOVERNMENT AND POLITICS

3 units

Comparative study of constitutional principles, governmental institutions and political processes in selected contemporary nations. Emphasis on the U.S. and major European governments. POLS 001 and 002 usually required for advanced political science courses. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: POLS 130

Grade Mode: L, A, P

POLS 006 THE U.S. AND WORLD POLITICS

3 units

Introduction to various aspects of World Politics including the role of major political, social, economic, and defense institutions in countries. The model is American policy and relationship to global and bilateral institutions. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, P

POLS 007 PRINCIPLES OF POLITICAL SCIENCE

3 units

Scope and methods of political science; basic political philosophies and ideologies; some concepts of the modern state, public law, public administration and government. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: POLS 150

Grade Mode: L, A, P

POLS 020 INDEPENDENT STUDY

1 unit

Prerequisites: One semester of political science and permission of department chairperson.

Individual projects; research techniques; written reports. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A

*Course Identification Numbering System (C-ID)

POLS 021 INTRODUCTION TO POLITICAL ECONOMY

3 units

Political economy as a system; role of government; relationships among the public, quasi-public, and private sectors; strategies of government interventions; and the impact of government policies on the economy at the local, state, national, and global levels. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

POLS 022 INTRODUCTION TO POLITICAL THEORY

3 units

Introductory exploration of the nature and role of major political theories from ancient times to the present; central questions of political life, views of human nature, political organizations, power, justice, and revolutions. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: POLS 120*

Grade Mode: L, A, P

POLS 110 SKILLS FOR COLLEGE SUCCESS IN POLITICAL SCIENCE

1 unit

Development of essential study techniques for success in political science courses; orientation to applications of computer-based technologies in political science; time management; textbook mastery, lecture outlining, test taking, and critical analysis. Total of 18 hours lecture.

Grade Mode: L, A, P

POPULAR MUSIC

(Performing and Communication Arts Division)

MUSP 007 HISTORY AND ANALYSIS OF POPULAR MUSIC

3 units

Prerequisite: MUSC 001A.

Comprehensive examination of the development of Western Popular music through listening, musical analysis, and the study of musical techniques. Survey of historical details, including cultural, intellectual, and social influences on musical trends and styles. **For** music majors, but open to all qualified students. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit under review.

Grade Mode: L, A

PORTUGUESE

(Languages Division)

PORT 001 ELEMENTARY PORTUGUESE – LEVEL 1

5 units

Practice in pronunciation, reading, writing, and speaking. Introduction to customs and culture of Portugal, Brazil, and the Portuguese diaspora. Corresponds to first year high school Portuguese. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

PORT 002 ELEMENTARY PORTUGUESE – LEVEL 2

5 units

Prerequisite: PORT 001 or placement based on the foreign language assessment process.

Completion of elementary essentials; stress on oral work; further study of Portuguese and Brazilian culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

PORT 003 INTERMEDIATE PORTUGUESE

5 units

Prerequisite: PORT 002 or two years of high school Portuguese or placement based on the foreign language assessment process.

Development of communication skills based on 19th and 20th century Portuguese-language readings; review of basic structure of Portuguese. Customs and culture. Total of 90 hours lecture.

Transfer credit: CSU; UC

Grade Mode: L, A, P

PORT 004 INTERMEDIATE PORTUGUESE

5 units

Prerequisite: PORT 003 or three years of high school Portuguese or placement based on the foreign language assessment process.

Further development of communication skills based on 19th and 20th century Portuguese-language readings; finish review of the basic structure of Portuguese. Customs and culture. Total of 90 hours lecture.

Transfer credit: CSU; UC

Grade Mode: L, A, P

PORT 140 PORTUGUESE PRONUNCIATION

2 units

Introduction to the Portuguese sound system, basic stress and intonation patterns. Imitation and practice of proper pronunciation; reading of Portuguese texts. For beginners and those wishing to gain additional proficiency in pronunciation. Total of 36 hours lecture.

Grade Mode: L, A, P

PORT 150A PORTUGUESE FOR TRAVEL AND BUSINESS

2 units

Practical conversational Portuguese for travel and business. Contemporary culture in Portuguese-speaking areas. Total of 36 hours lecture.

Grade Mode: L, A, P

PORT 150B PORTUGUESE FOR BUSINESS AND TRAVEL

2 units

Prerequisite: PORT 150A or placement based on the foreign language assessment process.

Further practice in practical conversational Portuguese for travel and business. Contemporary culture in Portuguese-speaking countries. Total of 36 hours lecture.

Grade Mode: L, A, P

PSYCHOLOGY

(Social Sciences Division)

PSYC 001 INTRODUCTORY PSYCHOLOGY

3 units

Principles of human behavior; physiological foundations, influence of heredity and environment; sense-perception, attention, capacities and abilities; learning; emotion and motivation; special emphasis on personality development and adjustment. **No credit** if taken after PSYC 001H. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: PSY 110

Grade Mode: L, A, P

PSYC 001H HONORS INTRODUCTORY PSYCHOLOGY

3 units

Enrollment Limitation: Acceptance into the Honors program.

Principles of human behavior; physiological foundations, influence of heredity and environment; sense-perception, attention, capacities and abilities; learning; emotion and motivation; special emphasis on personality development and adjustment. This enriched course is designed for the Honors Program, allowing more student-directed discussions and more extensive writing assignments. **No credit** if taken after PSYC 001. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: PSY 110

Grade Mode: L, A, P

PSYC 002 ELEMENTARY PHYSIOLOGICAL PSYCHOLOGY

3 units

Prerequisite: PSYC 001.

Interrelationship of physiological mechanisms and behavior. Emphasis on the role of the brain and nervous system in perception, emotion, motivation, states of consciousness, language, memory and learning. Relevance of the biological perspective to an understanding of behavior and experience. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: PSY 150

Grade Mode: L, A, P

PSYC 003 ABNORMAL PSYCHOLOGY

3 units

Prerequisite: PSYC 001 or PSYC 001H.

The definition, theories, symptoms and treatment of psychological disorders. Review of major classes of mental disorders with a focus on commonly diagnosed disorders. Best practices in mental health treatment and community support systems. Special emphasis on critical thinking, and the impact of bias on marginalized groups. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: PSY 120

Grade Mode: L, A

PSYC 005 RESEARCH METHODS IN PSYCHOLOGY

4 units

Prerequisite: PSYC 001 or PSYC 001H; and one of the following: ENGL 001A or 001AH or 001AS; and one of the following: STAT 015 or STAT 018 or STAT 050 or STAT 050H.

Planning and execution of research in psychology, and analysis, interpretation and reporting of data. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC. *C-ID: PSY 205B

Grade Mode: L, P

PSYC 020 INDEPENDENT STUDY

1 unit

Prerequisites: One semester of psychology and permission of department chairperson.

Laboratory research projects; library research; design and construction of research equipment; experiments; written reports. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

PSYC 021 DEVELOPMENTAL PSYCHOLOGY: THE CHILD

3 units

Growth processes and dynamics of psychological development from conception through adolescence; physical, cognitive, emotional, personality, and social development of the child and adolescent. **No credit** if taken after PSYC 021H. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

*C-ID: CDEV 100

Grade Mode: L, A, P

*Course Identification Numbering System (C-ID)

**PSYC 021H HONORS DEVELOPMENTAL PSYCHOLOGY:
THE CHILD**

3 units

Enrollment Limitation: *Acceptance into the Honors program.*

Growth processes and dynamics of psychological development from conception through adolescence; physical, cognitive, emotional, personality, and social development of the child and adolescent. This enriched course is designed for the Honors Program allowing more student directed discussions and more extensive writing assignments. **No credit** if taken after PSYC 021. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: CDEV 100*

Grade Mode: L, A, P

**PSYC 022 DEVELOPMENTAL PSYCHOLOGY:
THE ADULT**

3 units

Dynamics of psychological development from young adulthood through maturity and old age; sensory, motor, neurological, and cognitive changes; development of personality and social behavior through the adult life cycle; process of aging, dying, and bereavement. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

PSYC 023 SOCIAL PSYCHOLOGY

3 units

The individual within a social context; the scientific study of how people think about, influence and relate to one another. Topics include: attitude development and change; conformity, persuasion, leadership; and interpersonal relations, prejudice, aggression, conflict resolution, liking and loving others. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: PSY 170*

Grade Mode: L, A, P

PSYC 024 LIFESPAN DEVELOPMENTAL PSYCHOLOGY

3 units

Process and dynamics of human development from conception through adult maturity, old age, and death; biological, cognitive, personality, sociocultural, and existential factors influencing the course of psychological development across the lifespan. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: PSY 180*

Grade Mode: L, A

PSYC 025 HUMAN SEXUALITY

3 units

Historical, psychological, sociological and biological aspects of love, intimacy and human sexuality. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: PSY 130*

Grade Mode: L, A, P

PSYC 029 PSYCHOLOGY OF THE AFRO-AMERICAN

3 units

Afro-American behavior patterns in relationship to dominant concepts in psychology. Analysis of psychological attitudes and problems of Afro-Americans resulting from racism, oppression and alienation. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

PSYC 031 STUDIES IN CHICANO BEHAVIOR

3 units

An examination of Mexican-American behavior patterns. Emphasis on attitudes, feelings and socio-psychological conflicts of the Mexican-American in relation to social situations. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

**PSYC 033 PSYCHOLOGY OF PERSONAL AND SOCIAL
ADJUSTMENT**

3 units

Dynamics of personality; problems of adjustment to life stresses, theories of therapy. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: PSY 115*

Grade Mode: L, A, P

PSYC 041 PSYCHOLOGY OF THE ASIAN AMERICAN

3 units

Asian American behavior patterns in relationship to basic principles of psychology; search for identity in a multicultural society; roles of male and female in Asian American society. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

**PSYC 110 SKILLS FOR COLLEGE SUCCESS
IN PSYCHOLOGY**

1 unit

Development of essential study techniques for success in psychology courses; orientation to applications of computer-based technologies in psychology; time management; textbook mastery, lecture outlining, test taking, and critical analysis. Total of 18 hours lecture.

Grade Mode: L, A, P

**Course Identification Numbering System (C-ID)*

PSYC 120 PARENTING**3 units**

Theories of parenting. Stages of human development. Effect of family relationships on children. Specific problems related to growth and learning in children. Total of 54 hours lecture.

Grade Mode: L, A, P**RADIOLOGIC TECHNOLOGY****(Health Sciences Division)****RDTC 100 BASIC RADIOLOGIC TECHNOLOGY PRACTICES****2 units**

Prerequisites: PYSO 002A and B within 3 years, and completion of MA 115 within one year of acceptance in Radiological Technology Program.

Corequisite: RDTC 101.

Radiologic technology as a profession. Responsibilities of the radiologic technologist regarding ethics and the patient's emotional needs. Patient consents. Developing introductory positioning skills using anatomical landmarks, role-play in chest radiography. Total of 18 hours lecture and 18 hours laboratory.

Grade Mode: L, A**RDTC 101 MEDICAL PROCEDURES FOR THE TECHNOLOGIST****3 units**

Prerequisites: Valid CPR card and PYSO 002A and B.

Corequisite: RDTC 100.

Physical needs of the X-ray patient with emphasis on aseptic technique, required preparations and ECG procedure. Responsibilities of the technologist during first aid and crash cart procedure. CPR review. **Eight weeks.** Total of 24 hours lecture and 24 hours laboratory.

Grade Mode: L, A**RDTC 102 RADIATION PROTECTION****3 units**

Prerequisites: RDTC 100 and 101.

Corequisites: RDTC 103A, 110, 112A, 117A.

Radiologic protection for operator and patients complying with the State of California Administrative Code, Title 17. Use of X-ray equipment, X-ray machine circuitry with emphasis on devices and techniques to reduce ionizing radiation. Total of 54 hours lecture.

Grade Mode: L, A**RDTC 103A RADIOGRAPHIC ANATOMY AND POSITIONING****3¹/₂ units**

Prerequisites: RDTC 100 and 101.

Corequisites: RDTC 102, 110, 112A, 117A.

Positioning nomenclature, topographic anatomy emphasizing surface landmarks to locate organs within each body region. Positioning by use of phantoms. Radiography of the skeleton, thoracic cavity and abdominal cavity. Anatomy and positioning of the gastrointestinal and biliary tracts. Basic mobile radiography. Radiography of pediatric, geriatric and psychiatric patients. Types of contrast media. Total of 45 hours lecture and 72 hours laboratory.

Grade Mode: L, A**RDTC 103B RADIOGRAPHIC ANATOMY AND POSITIONING****3¹/₂ units**

Prerequisites: All of the following: RDTC 102, 103A, 110, 112A, 117A.

Corequisites: RDTC 104, 112B, 117B.

Anatomy and positioning of the cervical, thoracic and lumbar spines, the salivary glands and skull. Anatomy and positioning of the genitourinary tract. Principles of tomography equipment. Opaque media, drug side effects and indications. Use of phantoms. Emphasis on skull positioning. Radiograph critique. Total of 45 hours lecture and 72 hours laboratory.

Grade Mode: L, A**RDTC 103C RADIOGRAPHIC ANATOMY AND POSITIONING****3 units**

Prerequisites: RDTC 103B and 119.

Corequisites: RDTC 105, 111, 117C.

Identification of sectional anatomy concentrating on brain, neck, thorax, abdomen, and pelvis, including the cervical, thoracic and lumbar spines. Correlation of axial, sagittal and coronal sections to positioning in CT scanning and some MRI scanning. Total of 54 hours lecture.

Grade Mode: L, A**RDTC 104 PRINCIPLES OF RADIOGRAPHIC EXPOSURE****3 units**

Prerequisites: All of the following: RDTC 102, 103A, 110, 112A, 117A.

Corequisites: RDTC 103B, 112B, 117B.

Development and use of technique charts. Calculations to determine specific exposures. Processing techniques and other factors affecting radiographic quality. Use radiographic phantoms and accessory devices. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A

RDTC 105 SPECIAL RADIOGRAPHIC PROCEDURES**3 units****Prerequisites:** RDTC 119.**Corequisites:** RDTC 103C, 111, 117C.

Specialized technical procedures in radiography. Angiogram, equipment and accessories. Anatomy and physiology of involved areas. Emphasis on myelography, selective angiography and the technologist as part of the special procedures team. Total of 54 hours lecture.

Grade Mode: L, A**RDTC 110 PROFESSIONAL ETHICS****2 units****Prerequisites:** RDTC 100 and 101.**Corequisites:** RDTC 102, 103A, 112A, 117A.

Integration of interpersonal skills while analyzing the medicolegal issues, professional and ethical values in radiologic technology. Total of 36 hours lecture.

Grade Mode: L, A**RDTC 111 COMPUTERIZED IMAGING****2 units****Prerequisites:** RDTC 119.**Corequisites:** RDTC 103C, 105 and 117C.

Principles, components and functions of computerized imaging systems with emphasis on the application of computers in the radiology department. Brief introduction to computed tomography, magnetic resonance imaging. Total of 36 hours lecture.

Grade Mode: L, A**RDTC 112A RADIOLOGIC PHYSICS****3 units****Prerequisites:** RDTC 100 and 101.**Corequisites:** RDTC 102, 103A, 110, 117A.

Fundamentals of electrical and radiation physics. Emphasis on principles underlying optics, electromagnetic and other types of ionizing radiation. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A**RDTC 112B RADIOLOGIC PHYSICS****3 units****Prerequisites:** All of the following: RDTC 102, 103A, 110, 112A, 117A.**Corequisites:** RDTC 103B, 104, 117B.

Function and use of basic radiologic physics in diagnostic radiology. Applied physical rules and laws in general physics, production of the X-ray beam, tubes and generators, circuitry and equipment. Quality assurance of special equipment. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L, A**RDTC 113A CLINICAL LEARNING EXPERIENCE****2 units****Prerequisites:** All of the following: RDTC 102, 103A, 112A, 117A.

Intermediate Clinical Learning Experience in a Radiology Department of an affiliate hospital or medical center under the supervision of a licensed Radiologic Technologist. Participation will include observation, assistance and performance in basic radiographic procedures. Clinical practice shall be designed to provide standard patient care and assessment, integration and application of radiographic procedures learned during the first semester, which include the upper and lower limbs, and the gastrointestinal tract.

Short term course. Total of 96 hours laboratory.**Grade Mode:** L, A**RDTC 113B CLINICAL LEARNING EXPERIENCE****6 units****Prerequisites:** All of the following: RDTC 103C, 105, 111, 113A, 117C.

Intermediate clinical learning Experience that is designed for sequential development, application, integration, synthesis and evaluation of concepts and theories in the performance of radiographic procedures. Clinical practice shall be designed to provide patient care and assessment, competent performance of basic and advance radiographic procedures under the appropriate level of supervision of a licensed Radiologic Technologist, and enhance professional development. **Short term course.** Total of 192 hours of laboratory.

Grade Mode: L, A**RDTC 116 PERSPECTIVES IN RADIOLOGIC TECHNOLOGY****2 units****Prerequisites:** All of the following: RDTC 103C, 105, 111, 117C.

Corequisites: RDTC 117D; 118; **and** either RDTC 121 or 123. Utilization of advanced concepts, principles and skills of the radiologic technologist in an affiliated hospital as an extension of and related to classroom instruction. Emphasis on film critique. Total of 36 hours lecture.

Grade Mode: L, A**RDTC 117A CLINICAL EXPERIENCE****2 units****Prerequisites:** All of the following: RDTC 100, 101, valid CPR card.**Corequisites:** RDTC 102, 103A, 110, 112A.

Clinical experience in a radiology or medical imaging facility under the supervision of a licensed Radiologic Technologist. Participation will consist of observation, assistance and performance. Total of 288 hours laboratory.

Grade Mode: L, A

RDTC 117B CLINICAL EXPERIENCE**2 units****Prerequisites:** *All of the following: RDTC 102, 103A, 110, 112A, 117A.***Corequisites:** *RDTC 103B, 104, 112B.*

Clinical experience in the radiology department of affiliated hospitals under the supervision of a licensed radiologic technologist. Total of 288 hours laboratory.

Grade Mode: L, A**RDTC 117C CLINICAL EXPERIENCE****4 units****Prerequisites:** *All of the following: RDTC 117A, 117B, 119, valid CPR card.***Corequisites:** *RDTC 103C, 105, 111.*

Clinical experience in the radiology department of affiliated hospitals under the supervision of a licensed radiologic technologist. Total of 576 hours laboratory.

Grade Mode: L, A**RDTC 117D CLINICAL EXPERIENCE****4 units****Prerequisites:** *All of the following: RDTC 103C, 105, 111, 117C.***Corequisites:** *RDTC 116, 118, and either RDTC 121 or 123.*

Clinical experience in the radiology department of affiliated hospitals under the supervision of a certified radiologic technologist. Total of 512 hours laboratory.

Grade Mode: L, A**RDTC 118 FLUOROSCOPY****3 units****Prerequisites:** *All of the following: RDTC 103C, 105, 111, 117C.***Corequisites:** *RDTC 116; 117D; and either RDTC 121 or 123.*

Technical function and design of image intensification, recording monitoring systems, human anatomy and physiology of the eye. Emphasis on radiation protection and quality control testing. Total of 40 hours lecture and 15 hours laboratory.

Grade Mode: L, A**RDTC 119 CLINICAL EXPERIENCE****6¹/₂ units****Prerequisites:** *All of the following: RDTC 103B, 104, 113A, 117B.*

Clinical experience in affiliated hospitals as an extension of and related to classroom instruction, and application of disease and injury changes. Emphasis on features of conditions in X-ray examinations. **Ten weeks.** Total of 20 hours lecture and 380 hours laboratory.

Grade Mode: L, A**RDTC 120 INDEPENDENT STUDY****1 unit****Prerequisite:** *RDTC 101.*

Research or clinical project including experience in clinical practice settings, practical laboratory assignment, lecture attendance, literature review and community projects. Total of 54 hours laboratory.

Grade Mode: L, A**RDTC 121 MAMMOGRAPHIC PROCEDURES****3 units****Prerequisites:** *All of the following: RDTC 103C; 105; 111; 117C or a valid CRT ARRT Certification certificate.***Corequisites:** *RDTC 116, 118, 117D. For non-PCC students documentation of current California Radiologic Technology Certificate in Diagnostic Radiologic Technology and/or approved by Program Director.*

Technical and procedural aspects of mammography including radiation protection, quality assurance, breast anatomy, pathology, film critique, positioning and mass localization procedures. Total of 54 hours lecture.

Grade Mode: L, A**RDTC 123 COMPUTERIZED TOMOGRAPHY****3 units****Prerequisites:** *All of the following: RDTC 103C; 105; 111; 117C or a valid California Radiologic Technologist Certificate in Diagnostic Radiology, and/or approval from the Program Director.***Corequisites:** *RDTC 116, 118, 117D. For non-PCC students documentation of current California Radiologic Technology Certificate in Diagnostic Radiologic Technology and/or approved by Program Director.*

Principles of computed tomography, including data acquisition, image reconstruction, image display system, image recording system, and image storage system. Quality assurance aspects of CT, and basic concepts of Spiral and Helical scanning. Total of 54 hours lecture.

Grade Mode: L, A**RELIGIOUS STUDIES****(Social Sciences Division)****RELG 001 RELIGIOUS ISSUES, PERSONALITIES AND VALUES****3 units**

Origin and function of religion in its individual and sociological aspects; basic characteristics of major religions; outstanding personalities, sacred writings, historical foundations of basic religious traditions. Total of 54 hours lecture.

*Transfer Credit: CSU; UC***Grade Mode:** L, P

RELG 002 COMPARATIVE RELIGIONS: FAR EAST

3 units

Beliefs, practices, and cultural history of the major living religions of South and East Asia, including Hinduism, Buddhism, Confucianism, Daoism, and Shinto. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

RELG 003 COMPARATIVE RELIGIONS: NEAR EAST

3 units

Cultural history and doctrinal interpretations of living religions of Near East: Zoroastrianism, Islam, Judaism and Christianity. Summary contrasts and comparisons with emphasis on present-day religious issues and their relationship to social and political problems. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

RESTORATIVE DENTAL TECHNOLOGY (Health Sciences Division)

RDT 125A BEGINNING CROWN AND BRIDGE

4 units

Corequisites: RDT 130A, 135A, 140A, 145, and 150.

Theory, laboratory techniques and procedures for inlay, onlay and crown fabrication; model and die fabrication, mounting patient cases to a semi-adjustable articulator, wax design of fixed restorative prosthetics, direct spruing and investing, of single inlays, crowns and onlays dental restorations. Identification of the margin in dental impressions, on stone dies, and on computer rendered (CAD) images or designs generated from a digital impression scan. Esthetics, basic occlusal factors, tooth contour and anatomy of single tooth restorations as both a computer-aided-design (CAD) rendering and as a manual design. Total of 36 hours lecture and 108 hours laboratory.

Grade Mode: L

RDT 125B ADVANCED CROWN AND BRIDGE

5 units

Prerequisites: RDT 125A or the equivalent knowledge and experience.

Corequisites: RDT 130B, 135B, 140B, 155, and 160.

Theory, techniques and laboratory procedures for advanced crown and bridge fabrication. Emphasis on principles of fixed partial denture (FPD)/bridge design for esthetics, function, sanitation and comfort. Abutment theory, pontic designs and bridge retainer designs in both wax and by using computer-aided-design (CAD) software, laboratory procedures related to the lost wax process, casting, metal finishing and polishing for both single and multiple unit/tooth fixed restoration prosthetics. Laboratory proj-

ects include design and fabrication of a multiple unit/tooth simulated patient case with an FPD with a semi-precision (broken-stress) attachment, post/core telescopic crown restoration mounted on a semi-adjustable articulator, dental alloy soldering procedures for bridge connectors and crown repairs. Reinforcement of techniques taught in the basic Crown and Bridge curriculum with emphasis on productivity, time management and quality requirements. **Maximum credit** for RDT 125B and DLT 114B is 5 units. Total of 36 hours lecture and 162 hours laboratory.

Grade Mode: L

RDT 130A BEGINNING COMPLETE DENTURES

4 units

Corequisites: RDT 125A, 135A, 140A, 145, and 150.

Infection control procedures as they pertain to removable prosthetics. Theory and related laboratory procedures for fabricating preliminary and master casts followed by custom edentulous impression trays, record bases, and occlusion rims. Will learn how to use the semi-adjustable articulator for mounting denture master casts following the arbitrary mount method and incorporating condylar guidance as well as anterior guidance. Denture tooth selection, esthetic arrangement and set up of a complete set of maxillary and mandibular denture teeth into bilateral balance functional occlusion followed by anatomic wax up of the gingival architecture. Total of 36 hours lecture and 108 hours laboratory.

Grade Mode: L

RDT 130B ADVANCED COMPLETE DENTURES

5 units

Prerequisites: RDT 130A or the equivalent knowledge and experience.

Corequisites: RDT 125B, 135B, 140B, 155, and 160.

Theory and laboratory techniques for processing bilaterally balanced complete dentures to include: flasking (investing), boil-out, packing, compression and heat-curing techniques, denture recovery and occlusal adjustments, remounting procedures, selective grinding of opposing complete dentures to incorporate protrusive, bilateral balance, and correction of vertical errors, as well as finishing and polishing complete dentures to completion. Semi-adjustable articulators will be employed during these processing steps. Additional laboratory procedures include: characterizing denture base resins, repairing individual denture teeth and fractures in denture bases utilizing cold cure techniques, relining and rebase procedures for ill-fitting complete dentures, dentures opposing natural dentition, immediate dentures, cast metal denture bases, tooth-borne overdentures utilizing computer-aided-design (CAD) software, and techniques to duplicate dentures and fabricate a surgical template. **Maximum credit** for DLT 113B and RDT 130B is 5 units. Total of 36 hours lecture and 162 hours laboratory.

Grade Mode: L

RDT 135A BEGINNING DENTAL ANATOMY

2.5 units

Corequisites: *RDT 125A, 130A, 140A, 145, and 150.*

Introductory anatomy of the oral cavity to include: classifications of dentition, permanent and deciduous dentition, dental arch and quadrants, as well as names of teeth, three tooth numbering/notation systems and supporting structures of teeth: periodontium, alveolar process, and gingiva. Dental structures; crown and root, enamel and dentin, pulp and pulp cavity as well as dental nomenclature; terms for tooth surfaces, division of crowns and roots into horizontal and longitudinal thirds, combining terms of orientation, line and point angles for anterior and posterior teeth, distinctive crown convexities and elevations as well as distinctive crown concavities or depressions, geometric crown forms, contact areas and embrasures as well as individual tooth anatomy for maxillary and mandibular anterior teeth. Laboratory lectures and activities will include wax-carving exercises of anterior incisor teeth, intra-arch alignment, inter-arch relationships, facial and lingual contours, proximal surfaces, marginal ridges and interproximal contacts as well as centric (functional) and non-centric cusps, axial transitional lines and tooth designing activities using wax on mounted maxillary and mandibular models made of dental stone as well as designing activities using Computer-Aided-Design CAD software. **Maximum credit** for DLT 116A and RDT 135A is 2.5 units. Total of 27 hours lecture and 54 hours laboratory.

Grade Mode: L

RDT 135B INTERMEDIATE DENTAL ANATOMY

2.5 units

Prerequisites: *RDT 135A or the equivalent knowledge and experience.*

Corequisites: *RDT 125B, 130B, 140B, 155, and 160.*

Principles of posterior tooth anatomy, detailed sculpting and designing of selected posterior premolars and molars using wax carving blocks and computer-aided-design (CAD) software. Emphasis on the morphology of the five tooth surfaces, anatomy of the root, and detailed occlusal anatomy for all permanent posterior maxillary and mandibular premolar and molar teeth. To include dental anatomy nomenclature, development of the teeth, variations and anomalies, and fabrication methods for the interim or provisional fixed prosthesis as well as preparing and mounting dental casts to an articulator and anatomic tooth drawings of posterior teeth. **Maximum credit** for DLT 116B and RDT 135B is 2.5 units. Total of 27 hours lecture and 54 hours laboratory.

Grade Mode: L

RDT 140A BEGINNING DIGITAL DENTISTRY CAD CAM I

1.5 units

Corequisites: *RDT 125A, 130A, 135A, 145, and 150.*

Introduction to the concept of digital dentistry: its applications, advantages and limitations. Computer-aided-de-

sign (CAD) and computer-aided-manufacture (CAM) system components and how they are related. Laboratory projects include using case manager software to set up new patient cases, importing scanned STL digital data/files into 3-D design software, and using digital design tools and icons. Emphasis on step-by-step laboratory procedures associated with the digital design of fixed single tooth full crown dental prostheses using the laboratory scanner and computer-aided-design (CAD) software. For example, morphing tools, using the virtual articulator, digital manipulation, identifying margins on a 3-D rendering, rotation tool, path of insertion, tooth anatomy, calibration of the scanner and use of various milling materials. Students are expected to have a general understanding of Microsoft Windows, importing/exporting files and Microsoft Power Point. **Required** field trips. Total 9 hours lecture and 54 hours laboratory.

Grade Mode: L

RDT 140B INTERMEDIATE DIGITAL DENTISTRY CAD CAM II

1.5 units

Prerequisites: *RDT 140A or the equivalent knowledge and experience.*

Corequisites: *RDT 125B, 130B, 135B, 155, and 160.*

Course will explore various computer-aided-manufacture (CAM) milling machinery (wet and dry, various axes), milling materials, and their applications for the digital fabrication dental prostheses. Emphasis on learning to operate and maintain a milling unit, exporting .stl files to CAM software, using digital design software to generate digital designs of a fixed partial denture (FPD), interim FPD, FPD substrate and digital denture, and setting up patient cases in Dental Manager software. Students are expected to have a general understanding of Microsoft Windows, importing/exporting files and Microsoft Power Point. **Required** field trips. Total 9 hours lecture and 54 hours laboratory.

Grade Mode: L

RDT 145 DENTAL MATERIALS

2 units

Corequisites: *RDT 125A, 130A, 135A, 140A, and 150.*

Overview of the history of dentistry: its milestone developments. The role of the American Dental Association (ADA) Council on Dental Materials and Devices, American National Standards Institute (ANSI), Food and Drug Administration (FDA) and U.S. Bureau of Standards as they relate to dental materials standards for manufacturing, patient safety, infection prevention and control as well as safe storage requirements. The composition, characteristics, chemical composition, physical and biological requirements, and uses of gypsum products, dental waxes, impression materials, denture base materials, metals used in dentistry, dental porcelains, separating materials, fluxes and antfluxes, alcohols and acids (pickling solutions), wax solvents, abrasive (polishing agents), laboratory gases and some miscel-

laneous materials as they apply to the fabrication of dental prostheses. Total of 36 hours lecture.

Grade Mode: L

RDT 150 DENTAL COMMUNICATION AND WORKPLACE READINESS SKILLS

$\frac{1}{2}$ unit

Corequisites: RDT 125A, 130A, 135A, 140A, and 145.

Emphasis on the traits expected of a dental/oral health care professional that constitute professionalism and workplace readiness needed for success in a dental setting with a focus on specific skills needed for working in fixed and removable restorative dental laboratories. Included are skills in communicating professionally with dental colleagues in a dental office or operator or when in the presence of the dentist or a patient. Verbal and nonverbal communication skills, business telephone etiquette, written communication skills, and technology and voice mail etiquette will be studied. Job interview skills are included. Total of 9 hours of lecture.

Grade Mode: L

RDT 155 ANATOMY OF ORAL AND FACIAL STRUCTURES

1 unit

Prerequisites: RDT 145 and 150 or the equivalent knowledge and experience.

Corequisites: RDT 125B, 130B, 135B, 140B, and 160.

Anatomical structures of the human head (skull) and face as well as intraoral anatomy in relation to the fabrication of fixed and removable restorative dental prostheses. Overview of human anatomy to include: body planes, bony elevations, bone depressions and channels, and joints. Detailed emphasis of the bony anatomy of the skull, muscles of mastication, depressor muscles of the mandible, muscles of facial expression, intraoral soft tissue anatomy, and structures of the temporomandibular joint. **Maximum credit** for DLT 115 and RDT 155 is 1 unit. Total of 18 hours lecture.

Grade Mode: L

RDT 160 DENTAL CALCULATIONS, WEIGHTS AND MEASURES

$\frac{1}{2}$ unit

Prerequisites: RDT 145 and 150 or the equivalent knowledge and experience.

Corequisites: RDT 125B, 130B, 135B, 140B, and 155.

Various weight and measure systems commonly used in a fixed and removable restorative dental laboratory. Included are specific dental calculations, metal alloy formulations, use of instruments, conversions, gauges, and scales for restorative dental laboratory operations and procedures. Measures of temperature, length, liquid volume, and gauge thickness. Total 9 hours lecture.

Grade Mode: L

RDT 225A BEGINNING REMOVABLE PARTIAL DENTURES (RPDs)

4 units

Prerequisites: RDT 125B, 130B, 135B, 140B, 145, 150, 155, and 160 or the equivalent knowledge and experience.

Corequisites: RDT 230A, 235A, 240, 245, and 250.

Laboratory techniques and procedures required for the fabrication of chrome-cobalt removable partial denture (RPD) frameworks. Emphasis is on designing rationale and correct application of various RPD components (major and minor connectors as well as direct and indirect retentive clasp designs). Laboratory projects include; model preparation, fabrication of refractory casts, custom dentulous impression trays, principles of surveying and designing as well as the usage of the dental surveyor instrument, determination of the correct path of insertion for an RPD, as well as spruing, investing, burnout and induction casting procedures. Total of 36 hours lecture and 108 hours laboratory.

Grade Mode: L

RDT 225B ADVANCED REMOVABLE PARTIAL DENTURES (RPDs)

3 units

Prerequisites: RDT 225A, 240, 245, and 250 or the equivalent knowledge and experience.

Corequisites: RDT 230B, 235B, 255, 260, and 265.

Laboratory procedures and theory for seating metal chrome-cobalt RPD castings to their respective master casts. Included are laboratory procedures for performing necessary adjustments to the occlusion, metal finishing and polishing, as well as artificial tooth arrangements and denture base waxing, flasking procedures, wax elimination (boil out) and processing. Laboratory projects include RPD denture base relining procedures, various repairs to tooth and denture base fractures as well as electric and torch soldering of metal fractures and warped areas, as well as design and fabrication of an injection molded flexible RPD. Designing of a digital RPD using computer-aided-design (CAD) design software and overview of laboratory procedures for fabricating a Swing-Lock RPD. **Maximum credit** for DLT 119B and RDT 225B is 3 units. Total of 18 hours lecture and 108 hours laboratory.

Grade Mode: L

RDT 230A BEGINNING DENTAL CERAMICS

5 units

Prerequisites: RDT 125B, 130B, 135B, 140B, 145, 150, 155, and 160 or the equivalent knowledge and experience.

Corequisites: RDT 225A, 235A, 240, 245, and 250.

Complex model and die preparation and cast evaluation for metal-ceramic, pressed, and milled ceramic cases, physical characteristics of dental porcelain, metal-ceramic terminology, and components of the metal-ceramic restoration. Design and construction of single unit/tooth substructures (substrates) for metal-ceramic restorations as well as pressed and milled ceramic restorations utilizing

computer-aided-design (CAD) and computer-aided-manufacture (CAM) technologies as well as traditional analog lost wax technology and analysis of bonding mechanisms at the interface between the metal substructure and porcelain as well as difference between pressable ceramic and conventional porcelain systems. Laboratory procedures include: fabrication of pressed ceramic restorations, designing both metal and milled substrates, metal finishing techniques for various metal substructures, oxidation and metal cleansing procedures, basic porcelain application techniques up through opaque application and firing procedures for opaque cycles. **Maximum credit** for DLT 118A and RDT 230A is 5 units. Total of 36 hours lecture and 162 hours laboratory.

Grade Mode: L

RDT 230B ADVANCED DENTAL CERAMICS

5 units

Prerequisites: RDT 230A, 240, 245, and 250 or the equivalent knowledge and experience.

Corequisites: RDT 225B, 235B, 255, 260 and 265.

Theory and laboratory techniques for fabricating metal-ceramic crown and multi-unit fixed partial denture (FPD) restorations. Multi-unit substrate designs using traditional analog/manual wax design technique and also using computer-aided-design (CAD) software, application of discreet layers of opaque, dentin and enamel to substrates, various porcelain build-up or sculpting techniques, porcelain contouring, extrinsic staining, corrections and additions. Fabrication of porcelain shoulder or porcelain butt margins and porcelain laminate veneers. Pre-soldering procedures, various casting procedures, and metal finishing and preparation of multi-unit substrates for porcelain. Color science, shade verification, staining and glazing procedures. Metallurgy of base metal, noble metal, and high noble alloys. Porcelain chemistry and manufacture of metal-ceramic, all ceramic, milled and pressed porcelain systems as well as the coefficient of thermal expansion (CTE) and its limitations for each material. Firing procedures using the porcelain furnace and inputting firing parameters into the furnace. **Maximum credit** for DLT 118B and RDT 230B is 6 units. Total of 36 hours lecture and 162 hours laboratory.

Grade Mode: L

RDT 235A FUNCTIONAL OCCLUSION AND ARTICULATOR INSTRUMENTATION

2.5 units

Prerequisites: RDT 125B, 130B, 135B, 140B, 145, 150, 155, and 160 or the equivalent knowledge and experience.

Corequisites: RDT 225A, 230A, 240, 245, and 250.

Course focuses on the physiology of functional mandibular movement and advanced articulator instrumentation. Topics include; basic terminology/nomenclature associated with the study of occlusion, cusp positions in Maximum Intercuspation (MI) including cusp-to-marginal ridge and cusp-to-fossa patterns of occlusion, mandibular move-

ments, functional articulations, types of articulator instruments (hinge, semi-adjustable, and fully adjustable), and parts of a semi-adjustable articulator instrument. Laboratory projects include working with various jaw relationship records (checkbites) and the facebow transfer as well as how to use them to mount maxillary and mandibular casts to a semi-adjustable articulator and incorporating correct settings for condylar and anterior guidances. The fully adjustable articulator instrument and its associated occlusal records such as, pantographs, axiographs, and various facebows will also be introduced. Total of 27 hours lecture and 54 hours laboratory.

Grade Mode: L

RDT 235B ADVANCED FUNCTIONAL OCCLUSION AND BIOMECHANICS OF THE MASTICATORY SYSTEM

2.5 units

Prerequisites: RDT 235A, 240, 245, and 250 or the equivalent knowledge and experience.

Corequisites: RDT 225B, 230B, 255, 260 and 265.

Course is an intense study of the components of the stomatognathic system and how each corresponds to functional occlusion. A detailed review of the functional components of anterior and posterior teeth, analysis of the difference between malocclusion, normal occlusion, and adaptive occlusion, and learning skills in eliminating centric and excursive interferences and learning the impact interferences have on functional occlusion. Occlusal disharmony including bruxing and its impact on functional occlusion, a thorough review of the vertical and horizontal determinants of occlusal morphology and how they guide design of an optimum functional occlusion. Nomenclature and precision waxing techniques will be practiced. Laboratory projects will involve learning to design and recognize various functional occlusion types: bilaterally balanced, unilaterally balanced, cusp-fossa and mutually protected occlusions. Total of 27 hours lecture and 54 hours laboratory.

Grade Mode: L

RDT 240 ADVANCED DIGITAL DENTISTRY CAD CAM III

1.5 units

Prerequisites: RDT 140B, or the equivalent knowledge and experience.

Corequisites: RDT 225A, 230A, 235A, 245, and 250.

Course focuses on rapid prototype 3-D printing; laser sintered technology and generative computer-aided-manufacturing (CAM) processes. Included are usage of 3-D software to create orthognathic study casts, 3-D fabrication of laboratory models and dies, operation and maintenance of the 3-D printer, and generating transferable files in .stl format that will be exported to the 3-D Printer. Laboratory projects include: introductory design processes for fabrication of a digital removable partial denture (RPD) using RPD Design software, using Real View Engine software to assist

in viewing the patient's facial landmarks and smile design options, as well as a preview of Orthodontic Appliance Design software and Implant Studio software. Total of 9 hours lecture and 54 hours laboratory.

Grade Mode: L

RDT 245 ORTHODONTICS AND PEDODONTICS

3 units

Prerequisites: RDT 125B, 130B, 135B, 140B, 145, 150, 155, and 160 or the equivalent knowledge and experience.

Corequisites: RDT 225A, 230A, 235A, 240, and 250.

Basic principles and laboratory procedures for the fabrication of digital and stone orthognathic study casts (models) that meet with criteria as set forth by the American Board of Orthodontics (ABO). Design and fabrication of orthodontic and pedodontic fixed and removable appliances with emphasis on design and wire contouring of various types of arch wires, clasps and springs, working with auto-polymerizing acrylic resin, laser welding and torch soldering procedures, as well as minor repairs. Laboratory projects include active and passive removable appliances such as the Hawley retainer, fixed space maintainer, arch expanders, inclined plane, space-closing or space-regaining appliances with expansion screws, and tooth stabilization holding appliances. Included is fabrication of an interim removable partial denture (RPD) stay plate with wrought/stainless steel wire clasps. **Maximum credit** for DLT 117 and RDT 245 is 3 units. Total of 27 hours lecture and 81 hours laboratory.

Grade Mode: L

RDT 250 LABORATORY BUS. MGMT/ ADMIN, LEGALITIES, ETHICS AND JURISPRUDENCE

1 unit

Prerequisites: RDT 125B, 130B, 135B, 140B, 145, 150, 155, and 160 or the equivalent knowledge and experience.

Corequisites: RDT 225A, 230A, 235A, 240, and 245.

Course emphasizes ethics, laws, federal and state regulations, and industry organizations governing the practice of restorative dental laboratory technology and the professional relationship of dentists and dental technologists. Introduction to managerial skills required for the operation of a dental laboratory business including development of the components of a business plan, marketing plan, business management/organizational plan and human resource management system. Studies will include an introduction to the use of computerized dental laboratory business management software. State and national professional dental technology organizations, the Certified Dental Technician (CDT), Recognized Graduate (RG), and Certified Dental Laboratory application requirements and procedures, benefits, and continuing education requirements. **Maximum credit** for DLT 124 and RDT 250 is 2 units. Total of 18 hours lecture.

Grade Mode: L

RDT 255 INTRODUCTION TO DENTAL IMPLANTS

2 units

Prerequisites: RDT 240, 245, and 250 or the equivalent knowledge and experience.

Corequisites: RDT 225B, 230B, 235B, 260 and 265.

Introduction to dental implants, their historical development, the concept of osseointegration, overview of the steps involved in implant surgery and laboratory procedures for fabricating single tooth fixed implant prosthetics. Implant material choices, nomenclature related to implantology, and the many components of an implant system. Laboratory procedures and fabrication of the radiographic stent, surgical guide template, master cast, articulation to a semi-adjustable articulator, use of the articulator during fabrication of implant prostheses, and provisional or interim implant prostheses will be practiced. Focus on fabrication of single-unit/tooth cement-retained and single-unit/tooth screw-retained implant prostheses. Course includes an overview of digital computer-aided-design (CAD) for implant prosthetics using Implant Studio software and a preview of implant-retained removable dentures, hybrid dentures, and a bar (Hader) and clip retained overdenture.

Required field trips. Students are expected to drive their own vehicle to implant laboratories during field trips. Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: L

RDT 260 TRANSITION TO THE RESTORATIVE DENTAL TECHNOLOGY PROFESSION

1.5 units

Prerequisites: RDT 240, 245, and 250 or the equivalent knowledge and experience.

Corequisites: RDT 225B, 230B, 235B, 255, and 265.

A review of nomenclature, concepts, dental materials, health and safety and infection prevention and control protocols, dental anatomy, articulator instrumentation and the facebow transfer, as well as laboratory techniques and procedures studied across the sub specialties throughout the two-year Restorative Dental Technology Program. Development of critical thinking skills and judgments as well as practical performance of laboratory skills practiced in commercial dental laboratories such that students may transition from being student technicians to certified technologists. Included is an overview of dental technology organizations and the certification process as well as an introduction of the government organizations that govern the practice of restorative dental technology. Course is also open to professional dental technologists already in commercial dental laboratories to serve as a refresher. Prepares graduates for written and practical components of the Certified Dental Technician Examination given by the National Bureau for Certification in Dental Technology. Course may also be taken for possible job advancement. Total of 9 hours lecture and 54 hours laboratory.

Grade Mode: L

RDT 265 CLINICAL EXPERIENCE

3 units

Prerequisites: RDT 240, 245, and 250 or the equivalent knowledge and experience.

Corequisites: RDT 225B, 230B, 235B, 255, and 260.

Emphasis is on having the student demonstrate and practice skills in restorative dental technology procedures in a commercial dental laboratory or dental laboratory setting. Will include participating in the fabrication of dental prostheses for patients currently under treatment or from actual casts or impressions and occlusal jaw relationship records from previously fabricated prostheses. Completion of a Personal Portfolio to include resume, sample letters, sample of laboratory projects, photo documentation of laboratory work, and letters of recommendation. Completion of detailed Work Journals and signed Attendance Sheets at laboratories is required. It is expected that students shall provide their own private transportation to clinical laboratory sites. **Maximum credit** for DLT 125 and RDT 265 is 3.5 units. Total of 18 hours lecture and 108 hours laboratory.

Grade Mode: L

RUSSIAN

(Languages Division)

RUSS 001 ELEMENTARY RUSSIAN

5 units

Pronunciation, reading, writing and speaking. Introduction to Russian geography, history and culture. Corresponds to first year of high school Russian. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

RUSS 002 ELEMENTARY RUSSIAN

5 units

Prerequisite: RUSS 001, or the first year of high school Russian, or placement based on the foreign language assessment process.

Grammar essentials; oral work; aspects of Russian history and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

RUSS 003 INTERMEDIATE RUSSIAN

5 units

Prerequisite: RUSS 002 or two years of high school Russian or placement based on the foreign language assessment process.

Development of communication skills based on contemporary Russian readings; review of basic structure of Russian. Customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

RUSS 004 INTERMEDIATE RUSSIAN

5 units

Prerequisite: RUSS 003 or three years of high school Russian or placement based on the foreign language assessment process.

Further development of communication skills based on contemporary Russian readings; finish review of basic structure of Russian. Customs and culture. Total of 90 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

RUSS 011 RUSSIAN CIVILIZATION

3 units

History, geography, language, literature and music; customs of the Soviet Union. (Course conducted in English.) Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

RUSS 150A RUSSIAN FOR BUSINESS AND TRAVEL

2 units

Practical conversation Russian for business and travel. Contemporary culture in Russian-speaking areas. Total of 36 hours lecture.

Grade Mode: L, A, P

RUSS 150B RUSSIAN FOR BUSINESS AND TRAVEL

2 units

Prerequisite: RUSS 150A or placement based on the foreign language assessment process.

Further instruction in conversational Russian for business and travel. Contemporary culture in Russian-speaking areas. Total of 36 hours lecture.

Grade Mode: L, A, P

SOCIAL SCIENCES

(Social Sciences Division)

SOSC 017 INTRODUCTION TO RESEARCH METHODS IN SOCIAL SCIENCES

3 units

Prerequisite: SOC 001.

Fundamental elements of empirical research and the ways in which social scientists gather, evaluate, and critique research findings. Attention to the importance of professional ethics when conducting research. Application of qualitative and quantitative analytic tools for research design, such as survey, observational, experimental, case study and comparative historical research. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: SOCI 120

Grade Mode: L

*Course Identification Numbering System (C-ID)

**SOSC 110 SKILLS FOR COLLEGE SUCCESS IN
SOCIAL SCIENCES**

1 unit

Development of essential study techniques for success in social science courses; orientation to computer-based technologies, time management, textbook mastery, lecture outlining, test taking, and critical analysis. Total of 18 hours lecture.

Grade Mode: L, A, P

SOCIOLOGY

(Social Sciences Division)

SOC 001 INTRODUCTORY SOCIOLOGY

3 units

Human culture, social order and group memberships. Cultural growth and change; ecology, population, social institutions; group processes, social control, personality. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: SOCI 110*

Grade Mode: L, A, P

SOC 002 CONTEMPORARY SOCIAL PROBLEMS

3 units

Identification and analysis of major social problems: inequality, poverty and welfare, incarceration, education. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: SOCI 115*

Grade Mode: L, A, P

SOC 014 INTRODUCTION TO ETHNIC STUDIES

3 units

An interdisciplinary course with focus on the sociological analysis of racial/ethnic relations in the U.S. It introduces core concepts, it explores the social, historical, economic and political construction of race and ethnicity, and it addresses the systematic aspect of racial/ethnic stratification. Through critical readings, individual reflections, class discussions, and documentaries students will have the opportunity to develop a solid grasp of immigration issues, colorblindness, white privilege, social & racial justice, and the intersectionality of race, class, and gender. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: SOCI 150*

Grade Mode: L, A, P

SOC 015 CRIME, DELINQUENCY AND SOCIETY

3 units

Analysis of crime theories, social control, and punishment. Examines the sociological impact, functions, and roles of the criminal and juvenile justice systems in the U.S.

Emphasis on the sociological process and impact of law enforcement, courts, and correctional components of the criminal justice and juvenile justice process. Focuses on the interaction between the citizen, the community, and the components of the justice system. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

SOC 016 URBAN SOCIOLOGY

3 units

The sociological nature, causes, theories, and consequences of urbanization along with its changing scale and complexity, demographics, and ecological patterns. The quality of life in urban areas, processes of decision-making in cities, and the bearing of sociological research on public policy and community are examined. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A

SOC 020 INDEPENDENT STUDY

1 unit

Prerequisites: One semester of sociology and permission of department chairperson.

Individual projects; research techniques; written reports. Total of 54 hours laboratory.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

SOC 022 SOCIOLOGY OF AGING

3 units

Examination of the physical, psychological and sociological aspects of aging in various cultures. Methods of dealing with aging for the individual. The family and society. Elders and the law. The sociology of grief in American culture and other cultures. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

SOC 024 MARRIAGE AND THE FAMILY

3 units

The family as a social institution; social, economic, legal, psychological aspects of marriage and family life; patterns of courtship, marriage and family organization. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: SOCI 130*

Grade Mode: L, A, P

SOC 029 SOCIOLOGY OF THE AFRICAN-AMERICAN

3 units

Sociological factors affecting African-American's relationships to major institutions, social movements, attitudes and values of American culture. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

**Course Identification Numbering System (C-ID)*

SOC 030 INTRODUCTION TO GENDER

3 units

Sociological analysis of the social construction of gender historically, contemporarily and cross- culturally. Examines the debates on sexuality and gender identity. Analysis of the impact of social institutions and practices including, but not limited to economic and political change, on gender expectations and practices. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: SOCI 140*

Grade Mode: L, P

SOC 031 CHICANO SOCIOLOGY

3 units

Cultural background of Mexican-American; major differences between Anglo and Mexican-American values and attitudes; past and present intercultural problems; economic, educational, political, language, family; Mexican-American contributions to the United States. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

SOC 041 SOCIOLOGY OF THE ASIAN AMERICAN

3 units

Analysis of sociological factors influencing Asian American experience in American society. Evaluation of effects of living in a dual culture with concomitant stresses upon Asian American psyche. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

SPANISH

(Languages Division)

SPAN 001 ELEMENTARY SPANISH

5 units

Beginning language acquisition with practice in listening, speaking, reading and writing. Introduction to customs and culture of Spain and Latin America. Corresponds to first year of high school Spanish. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: SPAN 100*

Grade Mode: L, A, P

SPAN 002 ELEMENTARY SPANISH

5 units

Prerequisite: SPAN 001 or 150B, or the first year of high school Spanish, or placement based on the foreign language assessment process.

Continuation of elementary grammar essentials; speaking, reading, listening and writing with stress on authentic language; further study of Spanish and Latin-American civi-

lization. **No credit** if taken after SPAN 002A. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: SPAN 110*

Grade Mode: L, A, P

SPAN 002A SPANISH FOR SPANISH SPEAKERS

5 units

Prerequisite: One year of high school Spanish, or placement based on the foreign language assessment process.

Intensive training in oral and written Spanish for those who speak it, but have had little or no formal training in the language. Improvement of oral expression; Spanish grammar; readings in contemporary Spanish prose; composition; study of Spanish and Latin American cultures. **No credit** if taken after SPAN 001 or 002. Total of 90 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID: SPAN 220*

Grade Mode: L, A, P

SPAN 003 INTERMEDIATE SPANISH

5 units

Prerequisite: SPAN 002 or 002A or two years of high school Spanish or placement based on the foreign language assessment process.

Reading, writing, speaking and listening with development of communication and analytical skills based on 20th and 21st century Spanish and Latin-American readings; review of Spanish grammar; increased vocabulary. Customs and culture. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: SPAN 200*

Grade Mode: L, A, P

SPAN 004 INTERMEDIATE SPANISH

5 units

Prerequisite: SPAN 003 or three years of high school Spanish or placement based on the foreign language assessment process.

Further reading, writing, speaking and listening with development of communication and analytical skills based on 20th and 21st century Spanish and Latin-American readings; review of Spanish grammar; increased vocabulary. Customs and culture. Total of 90 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: SPAN 210*

Grade Mode: L, A, P

SPAN 005 INTRODUCTION TO SPANISH LITERATURE

3 units

Prerequisite: SPAN 004 or placement based on the foreign language assessment process.

Reading and discussion of selections from Spanish literature. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

**Course Identification Numbering System (C-ID)*

SPAN 006A INTRODUCTION TO SPANISH-AMERICAN LITERATURE

3 units

Prerequisite: SPAN 004 or placement based on the foreign language assessment process.

Reading and discussion of selections from Spanish-American literature from the Conquest to the end of 19th Century. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

SPAN 006B INTRODUCTION TO SPANISH-AMERICAN LITERATURE

3 units

Prerequisite: SPAN 004 or placement based on the foreign language assessment process.

Reading and discussion of XX Century selections from Spanish-American literature. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

SPAN 008A-B INTRODUCTION TO SPANISH CONVERSATION

4 units

Prerequisite: SPAN 002 or two years of high school Spanish or placement based on the foreign language assessment process.

Practice in oral self-expression and understanding spoken Spanish. **No credit** if taken after SPAN 003 or SPAN 009A-C. **For** non-native speakers of Spanish. **Each course** 2 units, and a total of 36 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

SPAN 009A-C SPANISH CONVERSATION

6 units

Prerequisite: SPAN 003 or three years of high school Spanish or placement based on the foreign language assessment process.

Intensive practice in oral expression and comprehension of spoken Spanish. **Each course** 2 units, and a total of 36 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

SPAN 012 SPANISH LITERATURE IN TRANSLATION

3 units

Prerequisite: Eligibility for ENGL 001A.

Reading and discussion of major works of Spanish or Latin American literature in translation from different historical periods. Selections will be made from different genres: novel, drama, poetry and the essay. Students will learn to identify the unique traits of each work and become acquainted with the historical, cultural and artistic influ-

ences on them. (Course conducted in English.) Total of 54 hours lecture.

Transfer credit: CSU; UC

Grade Mode: L, A, P

SPAN 025 SPANISH COMPOSITION

3 units

Prerequisite: SPAN 004 or placement based on the foreign language assessment process.

Practice in writing Spanish with appropriate vocabulary, syntactical structures and stylistic patterns. Emphasis on written expression that is grammatically correct, lexically sophisticated and rhetorically competent. Production of coherent expository prose. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

SPAN 031 LANGUAGE OF THE BARRIO

3 units

Prerequisite: SPAN 001 or Spanish conversational ability.

Study of the language that is used in the Mexican-American barrios. Emphasis given to how language reflects the uniqueness of the community. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A, P

SPAN 042A CIVILIZATION OF SPAIN AND PORTUGAL

3 units

Lectures and discussions on the geography, history and institutions of Spain and Portugal; life and customs, literature, music and art. (Course conducted in English.) **No credit** if taken after SPAN 042 or 042B. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

SPAN 042B CIVILIZATION OF SPAIN AND PORTUGAL

3 units

Prerequisite: SPAN 003 or placement based on the foreign language assessment process.

Lectures and discussions on the geography, history and institutions of Spain and Portugal; life and customs, literature, music and art. (Course conducted in Spanish.) **No credit** if taken after SPAN 042 or 042A. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

SPAN 044A CIVILIZATION OF LATIN AMERICA

3 units

Geography, history, life, customs, literature, music and art of Spanish and Portuguese speaking peoples of Latin America. (Course conducted in English.) **No credit** if taken after SPAN 044 or 044B. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

SPAN 044B CIVILIZATION OF LATIN AMERICA

3 units

Prerequisite: *SPAN 003 or placement based on the foreign language assessment process.*

Geography, history, life, customs, literature, music and art of Spanish and Portuguese speaking peoples of Latin America. (Course conducted in Spanish.) **No credit** if taken after SPAN 044 or 044A. Total of 54 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Grade Mode: L, A, P

SPAN 050 SPANISH AND LATIN AMERICAN CINEMA

3 units

Prerequisite: *Eligibility for ENGL 001A or placement based on the foreign language assessment process.*

Introductory study of Spanish and Latin-American films. The historical evolution of cinema as an art form, with emphasis on major themes, directors and movements, including recent developments in US Latino films. (Course conducted in English). Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

SPAN 150A SPANISH FOR BUSINESS AND TRAVEL

2 units

Practical conversational Spanish for business and travel. Contemporary culture in Spanish-speaking areas. Total of 36 hours lecture.

Grade Mode: L, A, P

SPAN 150B SPANISH FOR BUSINESS AND TRAVEL

2 units

Prerequisite: *SPAN 150A, or placement based on the foreign language assessment process.*

Further instruction in conversational Spanish for business and travel. Contemporary culture in Spanish-speaking areas. Total of 36 hours lecture.

Grade Mode: L, A, P

SPECIAL EDUCATION TECHNOLOGY

(Social Sciences Division)

SET 102 ADULTS WITH DISABILITIES

3 units

Exploration of the effects of disabilities and resulting functional limitations of adults on their personal relationships, behavior and roles in society. **Recommended** enrollment in or completion of PSYC 022. Total of 54 hours lecture.

Grade Mode: L, A, P

SET 108 INTRODUCTION TO LEARNING DISABILITIES

3 units

Introduction to the concept of learning disabilities, the recognition of learning disorders in children and adults and the various approaches for remediating or coping with these difficulties. For individuals who have a general interest in the field of learning disabilities and/or desire to help learning disabled individuals in the classroom, home or working world. **Recommended** enrollment in or completion of PSYC 021 or 022 or SET 100. Total of 54 hours lecture.

Grade Mode: L, A, P

SET 111 INTRODUCTION TO DEVELOPMENTAL DISABILITIES

3 units

Survey of developmental disabilities for which residential care facilities are designed with emphasis upon methods and strategies for behavior modification employed by residential care staff for infants, children and adults with developmental disabilities. Completion of SET 111 and SET 112 meets California Regional Center Certificate requirements. Total of 54 hours lecture.

Grade Mode: L, A, P

SET 112 WORKING WITH THE DEVELOPMENTALLY DISABLED

3 units

Practical applications of principles used in the administration of residential care facilities for persons with developmental disabilities; methods of accounting, licensing, health, safety and a review of programs available for the developmentally disabled. Completion of SET 111 and SET 112 meets California Regional Center Certificate requirements. Total of 54 hours lecture.

Grade Mode: L, A, P

SPECIAL SERVICES

(Special Services Division)

SPSV 101 SPEECH-LANGUAGE LAB

1 unit

Understanding and correction of one's speech, language and communication disorders. Designed for students with disabilities who are recommended by Special Services, including Disabled Students Programs and Services (DSPS). **Pass/no pass** grading. **No credit** if taken after SPCH 120. Total of 54 hours laboratory.

Grade Mode: P

SPSV 480A READING FOR DEAF STUDENTS – LEVEL 1

3 units

Introduction to vocabulary building, word attack skills, and basic reading techniques. **Recommended** enrollment

in SPSV 490A or ESL 490A. **No credit** if taken after ESL 432 or SPSV 480B, ENGL 415, 130, or 014. **Cannot be taken concurrently** with ESL 432, SPSV 480B or ESL 480B, ENGL 415, 130 or 014. Total of 54 hours lecture and 18 hours laboratory.

Grade Mode: L, A, P

**SPSV 480B READING FOR DEAF STUDENTS –
LEVEL 2**

3 units

Prerequisite: *ESL 480A, ESL 460, SPSV 480A, or placement based on reading assessment.*

Development of work attack skills, vocabulary, study skills and basic reading techniques. **Recommended** enrollment in SPSV 490A or SPSV 490B or ESL 490A or ESL 490B. **No credit** if taken after ESL 432, ENGL 415, 130 or 014. **Cannot be taken concurrently** with SPSV 480A or ESL 480A, ENGL 415, 130 or 014. Total of 54 hours lecture and 18 hours laboratory.

Grade Mode: L, A, P

**SPSV 490A ESL READING AND WRITING FOR
DEAF STUDENTS – LEVEL 1**

4 units

Interdisciplinary Course: ESL 490A

Intensive practice in basic English sentence structure for students who are deaf or hard-of-hearing. Introduction to spelling, punctuation, vocabulary development and English writing conventions. **Recommended** enrollment in ESL 460. **No credit** if taken after ESL 033A, 033B, 122, ENGL 001A, 001B, 001C or 100. **Cannot enroll concurrently** in ESL 033A, 033B, 122, 420, 422, ENGL 001A, 001B, 001C, 100 or 400. **May not be taken concurrently** with or after ESL 490B, SPSV 490A or 490B. (Course conducted in American Sign Language.) Total of 90 hours lecture.

Grade Mode: L, A, P

**SPSV 490B ESL READING AND WRITING FOR
DEAF STUDENTS – LEVEL 2**

4 units

Interdisciplinary Course: ESL 490B

Prerequisite: *ESL 490A, SPSV 490A, or placement based on the ESL assessment process.*

Development of reading and writing skills for academic purposes for students who are deaf or hard-of hearing. Reading of low intermediate fiction and nonfiction; written practice in sentence patterns and compositions. **Recommended** enrollment in ESL 432. **No credit** if taken after ESL 033A, 033B, 122, ENGL 001A, 001B, 001C or 100. **Cannot enroll concurrently** in ESL 033A, 033B, 122, 420, 422, ENGL 001A, 001B, 001C, 100 or 400. **May not be taken concurrently** with or after ESL 490A, SPSV 490A

or SPSV 490B. (Course conducted in American Sign Language.) Total of 90 hours lecture.

Grade Mode: L, A, P

SPEECH COMMUNICATION

(Performing and Communication Arts Division)

SPCH 001 FUNDAMENTALS OF SPEECH

3 units

Principles and practices of public speaking, speech composition, organization, audience analysis and listening skills. **Recommended** proficiency in spoken English. **No credit** if taken after SPCH 001H. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: COMM 110*

Grade Mode: L

SPCH 001H HONORS FUNDAMENTALS OF SPEECH

3 units

Enrollment Limitation: *Acceptance to the Honors Program.*

Principles and practices of public speaking, speech composition, organization, audience analysis and listening skills. This enriched course is designed for the Honors Program requiring students to use stronger analytical skills to research and deliver speeches of more advanced topics.

Recommended proficiency in spoken English. Total of 54 hours lecture. **No credit** if taken after Speech 001.

*Transfer Credit: CSU; UC credit under review. *C-ID: COMM 110*

Grade Mode: L

SPCH 002 PERSUASION

3 units

Recommended Preparation: *SPCH 001 or ENGL 100.*

Examination of historical and contemporary approaches to persuasive messages. Presentation of persuasive appeals. Construction, delivery, and critique of persuasive messages. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

SPCH 003 VOICE AND DICTION

3 units

Physiological and anatomical basis of voice production and articulation. Instruction in articulation, pronunciation and vocal quality. **Recommended** proficiency in reading aloud. **For** broadcasting, drama and communication majors, but open to all qualified students. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

SPCH 004 ORAL INTERPRETATION

3 units

Oral presentation of thought and feeling by an individual performer in various types of prose and poetry. Criticism

*Course Identification Numbering System (C-ID)

and appreciation, analysis and evaluation. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: COMM 170*

Grade Mode: L

SPCH 005 FORENSICS - SPEECH AND DEBATE TEAM
3 units

Intercollegiate competitive speaking including platform events (informative, persuasive, communication analysis); interpretation (prose, duo, poetry, poi); limited preparation (impromptu and extemporaneous); and debate (parliamentary debate). **Maximum credit** for SPCH 005 is 12 units, 3 units each semester. Total of 36 hours lecture and 72 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: COMM 160B*

Grade Mode: L, A

SPCH 005A FORENSICS RESEARCH AND PREPARATION (SPEECH AND DEBATE TEAM)
3 units

Intercollegiate competitive speaking including platform events (informative, persuasive, communication analysis), interpretation (prose, duo, poetry, poi), limited preparation (impromptu and extemporaneous), and debate (parliamentary debate). **Required** instructional trips. **Maximum credit** 6 units, 3 units each semester. Total of 36 hours lecture and 72 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU. *C-ID: COMM 160B*

Grade Mode: L, A

SPCH 005B OFF-SEASON FORENSICS: SPEECH AND DEBATE TEAM
1 unit

Intercollegiate competitive speaking including platform events (informative, persuasive, communication analysis), interpretation (prose, duo, poetry, poi), limited preparation (impromptu and extemporaneous), and debate (parliamentary debate). **Required** instructional trips. Total of 54 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU. *C-ID: COMM 160B*

Grade Mode: L, A

SPCH 006 ARGUMENTATION AND DEBATE
3 units

Principles and forms of argumentation and debate. Logical analysis and reflective thinking. Adaptation of materials to audience situations. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: COMM 120*

Grade Mode: L

SPCH 008 READERS' THEATER

3 units

Oral presentation of literary material with emphasis on ensemble performance using choral reading and body movement. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

SPCH 009 SMALL GROUP COMMUNICATION

3 units

Principles of communication in a variety of group contexts. Theory, application, and evaluation of group communication processes, including problem solving, conflict management, decision making, and leadership. Total of 54 hours lecture.

*Transfer Credit: CSU. *C-ID: COMM 140*

Grade Mode: L

SPCH 010 INTERPERSONAL COMMUNICATION

3 units

Principles and practices in communication and communication theories. Intrapersonal, interpersonal and small group communication. Non-verbal communication, perception-information processing, attitude change and semantics. **Recommended** proficiency in spoken English. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: COMM 130*

Grade Mode: L

SPCH 012 ARGUMENTATION AND CRITICAL THINKING

3 units

Prerequisite: ENGL 001A.

Oral and extensive written analysis of propositions, tests of evidence, argumentation fields, critical analysis and interpretation and evaluation of contemporary public controversy. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: COMM 120*

Grade Mode: L

SPCH 013 INTRODUCTION TO SPEECH COMMUNICATION

3 units

A survey of the discipline of communication studies with emphasis on multiple epistemological, theoretical, and methodological issues relevant to the systematic inquiry and pursuit of knowledge about human communication. This course explores the basic history, assumptions, principles, processes, variables, methods, and specializations of human communication as an academic field of study. **Recommended** proficiency in spoken English. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: COMM 180*

Grade Mode: L

**Course Identification Numbering System (C-ID)*

SPEECH-LANGUAGE PATHOLOGY ASSISTANT

(Performing and Communication Arts Division)

SLPA 018 INTRODUCTION TO COMMUNICATION DISORDERS

3 units

Overview of the field of communication disorders. Survey and classification of communication disorders; identifying assessment and treatment of speech, language, swallowing and hearing disorders. Includes guided observation of 3 hours of speech therapy sessions. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L

SLPA 107 PHONETICS, ARTICULATION, AND PHONOLOGY

3 units

Prerequisite: *SLPA 018.*

Enrollment Limitation: *Admission to the SLPA program.*

Speech sound production and disorders, including a study of the International Phonetic Alphabet for classification, analysis, and transcription. Consideration for cultural and linguistic variations. Approaches and procedures for screening and intervention of speech sound disorders. Includes guided observation of 3 hours of speech therapy sessions. Total of 54 hours lecture and 18 hours laboratory.

Grade Mode: L

SLPA 115 CHILD LANGUAGE DEVELOPMENT AND DISORDERS

3 units

Prerequisite: *SLPA 018.*

Enrollment Limitation: *Admission to the SLPA program.*

Typical speech, language and hearing development including acquisition of phonology, morphology, semantics, syntax, and pragmatics; communication development in bilingual populations; and differentiation of typical from disordered communication. Study of prevention, assessment and intervention practices for language and literacy disorders in children and adolescents. Includes guided observation of 3 hours of speech therapy sessions. Total of 54 hours lecture and 18 hours laboratory.

Grade Mode: L

SLPA 119 SPEECH-LANGUAGE PATHOLOGY: PROFESSIONAL ISSUES

3 units

Prerequisite: *SLPA 018.*

Enrollment Limitation: *Admission to the SLPA program.*

Professional issues in the field of communication disorders with emphasis on practice as a Speech-Language Pathology Assistant. Regulatory and ethical considerations, scope of

responsibilities, and supervision. Practice issues including cultural and linguistic diversity, Augmentative and Alternative Communication (AAC), documentation, data collection, objectives, and treatment implementation. Total of 54 hours lecture and 18 hours laboratory.

Grade Mode: L

SLPA 123A COMMUNICATION DISORDERS: ASSESSMENT AND REMEDIATION

3 units

Prerequisite: *SLPA 119.*

Examination of specific disorders of communication, including their characteristics, causes and the anatomical structures and physiological muscle functions related to normal speech and language development. Assessment and screening techniques; scope of practice and role of the Speech-Language Pathology Assistant. Data collection, clinical documentation and record-keeping. **Required** for all Speech-Language Pathology Assistant majors. **No credit** if taken after SPCH 123. Total of 54 hours lecture and 18 hours laboratory.

Grade Mode: L

SLPA 123B COMMUNICATION DISORDERS: REMEDIATION

3 units

Prerequisite: *SLPA 123A.*

Remediation techniques, rationale for commonly used therapeutic approaches, including assistive and computer technology. Scope of practice and role of Speech-Language Pathology Assistant in intervention procedures including clinical documentation and appropriate use of therapeutic materials. **Required** for all Speech-Language Pathology Assistant majors. Total of 54 hours lecture and 18 hours laboratory.

Grade Mode: L

SLPA 126 SPEECH LANGUAGE PATHOLOGY ASSISTANT FIELD WORK

2 units

Prerequisite: *Enrollment in or completion of SLPA 123B.*

Corequisite: *SLPA 126S.*

Enrollment Limitation: *Admission to the SLPA program. Students must pass a health/safety and background check for both the college and the off-campus site. Requires instructor approval to ensure that the each student enrolled in the course has an approved contracted fieldwork site as well as an approved Master Clinician. Student must meet with the on-campus Instructor prior to semester of enrollment for:*

- fieldwork orientation (date to be announced in SLPA 123A or SLPA 123B)*
- establishment of a signed contract of understanding of all requirements for the off-campus experience*
- completion of the application indicating intent to enroll in SLPA 126 (available following orientation)*

Supervised fieldwork experience assisting with the clinical management of persons with communicative disorders. Opportunities to interact with clients/patients while implementing a prescribed treatment plan, assisting with screening or assessment under the supervision of a speech-language pathologist, record keeping and managing of clinical data, setting up clinical equipment and materials, and performing various clerical duties as needed. Students must work 75 paid hours or 60 non-paid hours per unit earned. Total of 120 hours unpaid or 150 hours paid field practice.

Grade Mode: L

SLPA 126S SPEECH-LANGUAGE PATHOLOGY ASSISTANT FIELD WORK SEMINAR

1 unit

Prerequisite: Enrollment in or completion of SLPA 123B .

Corequisite: SLPA 126.

Enrollment Limitation: Admission to the SLPA program.

Investigation of critical-thinking and decision-making skills related to technical proficiency of a Speech-Language Pathology Assistant. Total of 18 hours lecture.

Grade Mode: L

STATISTICS

STAT 015 STATISTICS FOR BUSINESS AND ECONOMICS

4 units

(Business and Engineering Technology Division)

Prerequisite: MATH 131 or MATH 150 or BUS 014A or placement based on the mathematics assessment process.

Descriptive and inferential statistics. Collection, analysis, and presentation of business and economic data using probability techniques, hypothesis testing, and predictive strategies to facilitate decision-making. Topics include measures of central tendency, and deviation; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi square, and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. **No credit** if taken after STAT 018 or 050 or 050H. Total of 72 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID:* MATH 110

Grade Mode: L, A

STAT 018 STATISTICS FOR BEHAVIORAL AND SOCIAL SCIENCES

4 units

(Social Sciences Division)

Prerequisite: MATH 131 or 150 or placement based on the statistics placement process.

Data-analysis concepts and procedures used in the social sciences. Topics include measures of central tendency and dispersion; probability and sampling distributions, methods of evaluating hypotheses and testing inferential statistics (t-tests, chi-square, ANOVA, correlation and regression). Applications to the social sciences using calculators and spreadsheets. **No credit** if taken after STAT 015 or STAT 050 or STAT 050H. Total of 72 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID:* SOCI 125

Grade Mode: L, A, P

STAT 050 ELEMENTARY STATISTICS

4 units

(Mathematics Division)

Prerequisite: MATH 131 or 141 or 150 or placement based on the Math assessment process.

Analysis of data using statistical methods: data collection, descriptive statistics, probability theory and inferential statistics. Topics include: sampling; measures of central tendency and variation; frequency charts and graphical representations of data; introductory probability; sampling distributions; correlation and linear regression; confidence intervals; hypothesis testing, including analysis of variance; and technology based statistical analysis from applications in engineering, social sciences, economics, psychology, and natural sciences. **No credit** if taken after STAT 015, 018, or 050H. Total of 72 hours lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

**C-ID:* MATH 110; SOCI 125

Grade Mode: L, P

STAT 050H HONORS ELEMENTARY STATISTICS

4 units

Prerequisite: MATH 131, 141, or 150 or placement based upon the math assessment process.

Enrollment Limitation: Acceptance to the PCC Honors Program.

Analysis of data using statistical methods: data collection, descriptive statistics, probability theory and inferential statistics. Topics include: sampling; measures of central tendency and variation; frequency charts and graphical representations of data; introductory probability; sampling distributions; correlation and linear regression; confidence intervals; hypothesis testing, including analysis of variance; and technology based statistical analysis from applications in engineering, social sciences, economics, psychology, and natural sciences. As an honors course, students will be expected to complete additional assignments to demonstrate stronger analytical skills and critical analysis

**Course Identification Numbering System (C-ID)*

of articles published in peer-reviewed journals and primary scientific literature. **No credit** if taken after STAT 015, 018, or 050. Total of 72 hours lecture.

*Transfer Credit: CSU; UC credit under review. *C-ID: MATH 110; SOCI 125*

Grade Mode: L, P

STAT 150 SUPPORT FOR ELEMENTARY STATISTICS

½ unit

Corequisite: STAT 050.

Review of core prerequisite skills, competencies, and concepts for statistics with an emphasis on critical thinking and problem solving. **Intended** for students who are concurrently enrolled in STAT 050: Elementary Statistics. Topics include learning strategies and mathematical knowledge necessary for successful completion of Elementary Statistics. Total of 36 hours laboratory.

Grade Mode: P

TECHNICAL EDUCATION (GENERAL)

(Business and Engineering Technology Division)

TECH 107A TECHNICAL CALCULATIONS

3 units

Review of basic arithmetic and geometric principles with application to solution of technical problems in the trades. Total of 54 hours lecture.

Grade Mode: L, A

TECH 120 INDEPENDENT STUDY

1 unit

Prerequisite: Completion of Career and Technical Education certificate or enrollment in last course of program sequence and permission of Division Dean.

Individual internship, community service, field practice opportunities in technology; on-the-job experiences in selected fields. Total of 54 hours of laboratory.

Grade Mode: L, A

TECH 196 TECHNOLOGY LABORATORY

1 unit

Opportunity for qualified students to do individual or group work in their chosen branch of technology. Total of 9 hours lecture and 27 hours laboratory.

Grade Mode: L, A

TECH 197 TECHNOLOGY LABORATORY

2 units

Opportunity for qualified students to do individual or group work in their chosen branch of technology. Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: L, A

TECH 198 TECHNOLOGY LABORATORY

5 units

Opportunity for qualified students to do individual or group work in their chosen branch of technology. Total of 45 hours lecture and 135 hours laboratory.

Grade Mode: L, A

TECH 199 TECHNOLOGY LABORATORY

10 units

Opportunity for qualified students to do individual or group work in their chosen branch of technology. Total of 90 hours lecture and 270 hours laboratory.

Grade Mode: L, A

TELEVISION AND RADIO

(Performing and Communication Arts Division)

TVR 001 INTRODUCTION TO ELECTRONIC MEDIA

3 units

Recommended Preparation: ENGL 001A.

Overview of the telecommunications industry. History, law, business operations, economics, new technology, career opportunities and the future of the telecommunications industry. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

TVR 002A BEGINNING AUDIO PRODUCTION

3 units

Introduction to the theory and practice of audio production for radio, television, film and digital recording applications. Fundamentals of sound design and aesthetics, microphone use, and digital recording equipment. Hands-on experience recording, editing, mixing and mastering audio. Basic knowledge of applied audio concepts, production workflow, equipment functions, and audio editing software. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

TVR 002B RADIO BROADCAST MASTER CONTROL OPERATIONS

3 units

Prerequisite: TVR 002A.

Introduction to radio broadcasting studio control room operations. Including FCC rules and regulations, program logs, running a live show board, radio automation, remote broadcasting for live events, call screening, Vox Pro, EAS Tests and network and satellite operations. SBE Certification. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L

TVR 004 BEGINNING SINGLE CAMERA PRODUCTION**3 units**

Introduction to the theory, terminology, and techniques of single camera video production including producing and directing, content development, aesthetics, camera operation, portable lighting, video recorder operation, sound recording and basic editing techniques. Total of 36 hours lecture and 54 hours laboratory.

*Transfer Credit: CSU. *C-ID: FTVE 130*

Grade Mode: L

TVR 007 BEGINNING TV STUDIO PRODUCTION**3 units**

Introduction to theory, terminology and operation of a multi-camera television studio and control room. Topics include studio signal flow, directing, theory and operation of camera and audio equipment, switcher operation, fundamentals of lighting, graphics, video control and video recording and real-time video production. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

TVR 012 BEGINNING ANNOUNCING AND PERFORMING IN ELECTRONIC MEDIA**3 units**

Recommended Preparation: *SPCH 003.*

Performance for electronic media with emphasis on voice skills, communication of personality and ideas. Techniques for various microphones and environment. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

TVR 014A BEGINNING RADIO PRODUCTION**3 units**

Recommended preparation: *TVR 012 and TVR 015.*

Introductory course in theory and application of audio production techniques for radio. Students will gain a basic understanding of audio equipment in both live and pre-recorded broadcasting. This includes recording equipment, mixers, digital audio production, radio program formats, broadcast writing and announcing skills. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L

TVR 014B ADVANCED RADIO PRODUCTION**3 units**

Prerequisite: *TVR 014A, TVR 002A, and TVR 012.*

Recommended Preparation: *TVR 018.*

Advanced projects in radio, podcasting, and live-remote production. Program formats include news, public service

announcements, public affairs, documentary and music programs. Total of 18 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L

TVR 015 INTRODUCTION TO MEDIA WRITING**3 units**

Recommended Preparation: *ENGL 001A.*

Basic introductory course in writing for the film and electronic media. Emphasis on preparing scripts in proper formats, including fundamental technical, conceptual and stylistic issues related to writing fiction and non-fiction scripts for informational and entertainment purposes in film and electronic media. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

TVR 016A INTERMEDIATE PRODUCING AND DIRECTING**4 units**

Prerequisite: *TVR 007.*

Recommended Preparation: *Completion of or enrollment in TVR 004, 019, and 041.*

Concepts and practices in scripting, producing and directing a variety of television program formats for multi-camera studio production. Total of 63 hours lecture and 36 hours laboratory.

Transfer Credit: CSU

Grade Mode: L

TVR 016B VIDEO PRODUCTION**4.5 units**

Prerequisites: *TVR 004 and TVR 016A.*

Recommended Preparation: *TVR 019, TVR 041, TVR 107*

Advanced concepts and practices in scripting, producing, and directing a variety of program formats. Production of a project specifically designed to showcase advanced abilities. Guidance with job seeking skills, including resume writing and interviewing for employment. Total of 54 hours lecture and 90 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

TVR 017A TELEVISION AND FILM SCRIPT WRITING**3 units**

Script analysis and construction. Marketing of dramatic material for television and film productions. Methods, devices and forms of script writing. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

TVR 017B TELEVISION AND FILM SCRIPT WRITING**3 units**

Prerequisite: *TVR 017A.*

*Course Identification Numbering System (C-ID)

Advanced script analysis, development and construction. Emphasis on solving problems in the writing process. Study and employment of various problem-solving approaches to rewriting and refinement of scripts. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L

TVR 018 RADIO AND TELEVISION NEWSWRITING

3 units

Writing and editing radio and television news. Opportunities to participate in writing news copy for Lancer Radio and cable television. **Recommended** COMM 001 or JOUR 004A. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

TVR 019 INTRODUCTION TO MEDIA AESTHETICS AND CINEMATIC ARTS

3 units

Recommended Preparation: *Eligibility for ENGL 001A.*

An introduction to the close analysis of film, television and electronic media texts. The course will examine broad questions of form and content, aesthetics and meaning, and history and culture. Using a wide variety of TV, films, filmmakers, and film movements the course explores the diverse possibilities presented by the cinematic art form. Topics include modes of production, narrative and non-narrative forms, visual design, editing, sound, genre, ideology and critical analysis. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

TVR 021 ENTERTAINMENT INDUSTRY BUSINESS PRACTICES, MANAGEMENT, AND PRODUCING

3 units

Recommended Preparation: *Enrollment in or completion of TVR 001.*

Theory and practice of major media business sectors, management, and producing in media organizations and industries, including types of content, audience analysis, advertising and other funding sources, marketing, programming, business models, entrepreneurship, and legal, regulatory, and ethical issues. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, A

TVR 024 ELECTRONIC NEWS GATHERING AND DOCUMENTARY PRODUCTION

3 units

Prerequisite: *TVR 004, TVR 007, and TVR 041.*

Recommended Preparation: *TVR 018 and TVR 019.*

Creation of news and documentary content through the processes of development, preproduction, production,

and post-production. Application of structure, writing principles, reporting, voice over, aesthetics, and editing of electronic news gathering (ENG) and documentary using intermediate single camera shooting style and editing techniques. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L

TVR 041 BEGINNING DIGITAL NON-LINEAR VIDEO EDITING

3 units

Prerequisite: *TVR 007.*

Introductory theory and application of beginning editing techniques using the Avid Editing System. Study of the editing process. Digitizing, and editing scenes. **No credit** if taken after TVR 141A. Total of 36 hours lecture and 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L

TVR 104 LIVE SOUND REINFORCEMENT

3 units

Recommended Preparation: *TVR 002A.*

The elements of live sound reinforcement for front of house and monitor reinforcement including design and engineering, speaker and microphone types, placement of components, equalization methods, acoustics, wiring, AC power distribution, and mixing techniques. Emphasis on system engineering, component placement and mixing. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: L, A

TVR 107 INTERMEDIATE TV STUDIO OPERATIONS

4 units

Prerequisite: *TVR 007.*

Recommended preparation: *TVR 002A and TVR 019.*

Intermediate theory and application of television studio equipment in a hands-on, project-based learning environment, including operation of lighting equipment, switcher, cameras, audio mixer, computer graphics, and video monitoring and digital recording equipment. This class works in conjunction with student producers in the video production program to execute a variety of multi-camera productions. Total of 45 hours lecture and 90 hours laboratory.

Grade Mode: L

TVR 108 TELEVISION OPERATIONS

4 units

Prerequisite: *TVR 007.*

Definition, processing, distribution, and evaluation of television signals. Television system evaluation using standardized test signals and TV monitoring equipment. Total of 72 hours lecture and 18 hours laboratory.

Grade Mode: L, A

TVR 108A DIGITAL VIDEO SYSTEMS**2.5 units****Prerequisite:** TVR 007.**Recommended Preparation:** TVR 107.

Processing, testing, and transmission of audio and video signals within a post-production, television broadcasting and internet streaming environment. Preparation for the Society of Broadcast Engineers' Television Operator's Certification Examination. **No credit** if taken after TVR 108. Total of 36 hours lecture and 36 hours laboratory.

Grade Mode: L**TVR 108B VIDEO BROADCASTING AND STREAMING****2.5 units****Prerequisite:** TVR 108A.

Theory and application of the roles IP technology and digital signal processing play in the field of broadcasting and streaming environments. Topics include physical infrastructure, performance, transport and compression. Prepares students to take the SBE Television Operator's Certification Examination. Total of 36 hours lecture and 36 hours laboratory.

Grade Mode: L**TVR 117 TELECOMMUNICATIONS WORKSHOP****1 unit****Prerequisite:** One of the following: TVR 002B, 014A, 016A, 107.**Enrollment Limitation:** Instructor approval.

Faculty-selected projects permitting advanced students to work in any field of telecommunications. Total of 54 hours laboratory.

Grade Mode: L**TVR 119 SPORTS RADIO BROADCASTING WORKSHOP****3 units****Prerequisite:** One of the following: TVR 002B or 014A.

Faculty selected projects permitting advanced students to work in radio production and/or radio operations. Total of 162 hours laboratory.

Grade Mode: L**TVR 120 RADIO PRODUCTION WORKSHOP****2 units****Prerequisite:** One of the following: TVR 002B or 014A.

Faculty selected projects permitting advanced students to work in radio production and/or operations. Total of 108 hours laboratory.

Grade Mode: L**TVR 124 TELEVISION FIELD PRODUCTION****3 units****Prerequisites:** TVR 016A and TVR 107.

Television production and operations techniques associated with field production. Total of 36 hours lecture and

54 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Grade Mode: L**TVR 125A TELEVISION DRAMA PRODUCTION****3 units****Prerequisite:** TVR 007 or 107.

Techniques associated with three-camera production of dramatic scripts. Directing, blocking, scene breakdown, lighting and post-production. Production of television drama or comedy. Total of 18 hours lecture and 108 hours laboratory.

Grade Mode: L**TVR 125B TELEVISION DRAMA PRODUCTION****3 units****Prerequisite:** TVR 007 or 107.

Techniques associated with film-style production of dramatic scripts. Directing, blocking, scene breakdown, lighting and post-production. Production of television drama. Total of 18 hours lecture and 108 hours laboratory.

Grade Mode: L**TVR 128A TV OPERATIONS INTERNSHIP****1 unit****Prerequisites:** TVR 107 and maintain enrollment in 7 units or more including internship.**Enrollment Limitation:** Instructor approval.

Supervised, practical capstone experience in an industry-related professional environment. Designed for students in the TV Operations Certificate of Achievement program. **Pass/no pass** grading. **May not be taken concurrently** with TVR 129A. Total of 60 hours unpaid or 75 hours paid field practice.

Grade Mode: P**TVR 128B RADIO OPERATIONS INTERNSHIP****1 unit****Prerequisites:** TVR 002B and maintain enrollment in 7 units or more including internship.**Enrollment Limitation:** Instructor approval.

Supervised, practical capstone experience in an industry-related professional environment. Designed for students near completion of the Radio Production Certificate of Achievement program who wish to further develop technical skills. **Pass/no pass** grading. May not be taken concurrently with TVR 129B. Total of 60 hours unpaid or 75 hours paid field practice.

Grade Mode: P**TVR 128C BROADCAST NEWS/ADMINISTRATION
INTERNSHIP****1 unit****Prerequisites:** TVR 024 and maintain enrollment in 7 units or more including internship.

Enrollment Limitation: *Instructor approval.*

Supervised, practical capstone experience in an industry-related professional environment. Designed for students near completion of the Broadcast Journalism Certificate of Achievement program. **Pass/no pass** grading. **May not be taken concurrently** with TVR 129C. Total of 60 hours unpaid or 75 hours paid field practice.

Grade Mode: P

TVR 128D MUSIC RECORDING/AUDIO INTERNSHIP
1 unit

Prerequisites: *TVR 103A and maintain enrollment in 7 units or more including internship.*

Supervised, practical experience in an industry related professional environment. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128A, B, C, E, F or TVR 129A, B, C, D, E, F. Total of 90 hours field practice.

Grade Mode: P

TVR 128E TELEVISION PRODUCTION INTERNSHIP
1 unit

Prerequisites: *TVR 016A and maintain enrollment in 7 units or more including internship.*

Enrollment Limitation: *Instructor approval.*

Supervised, practical capstone experience in an industry-related professional environment. Designed for students near completion of the Video Production Certificate of Achievement program. **Pass/no pass** grading. **May not be taken concurrently** with TVR 129E. Total of 60 hours unpaid or 75 hours paid field practice.

Grade Mode: P

TVR 128F RADIO PRODUCTION INTERNSHIP
1 unit

Prerequisites: *TVR 014B and maintain enrollment in 7 units or more including internship.*

Enrollment Limitation: *Instructor approval.*

Supervised, practical capstone experience in an industry-related professional environment. Designed for students near completion of the Radio Production Certificate of Achievement program who wish to further develop production skills. **Pass/no pass** grading. **May not be taken concurrently** with TVR 129F. Total of 60 hours unpaid or 75 hours paid field practice.

Grade Mode: P

TVR 128G POST PRODUCTION INTERNSHIP
1 unit

Prerequisite: *TVR 141B and TVR 144.*

Enrollment Limitation: *Instructor approval.*

Supervised, practical capstone experience in an industry-related professional environment. Designed for students near completion of the Post Production Certificate of Achievement program. **Pass/no pass** grading. **May not**

be taken concurrently with TVR 129G. Total of 60 hours unpaid or 75 hours paid field practice.

Grade Mode: P

TVR 129A EXTENDED TV OPERATIONS INTERNSHIP
2 units

Prerequisites: *TVR 107 and maintain enrollment in 7 units or more including internship.*

Enrollment Limitation: *Instructor approval.*

Extended, supervised, practical capstone experience in an industry-related professional environment. Designed for students near completion of the TV Operations Certificate of Achievement program. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128A. Total of 120 hours unpaid or 150 hours paid field practice.

Grade Mode: P

TVR 129B EXTENDED RADIO OPERATIONS INTERNSHIP
2 units

Prerequisites: *TVR 002B and maintain enrollment in 7 units or more including internship.*

Enrollment Limitation: *Instructor approval.*

Extended, supervised, practical capstone experience in an industry-related professional environment. Designed for students near completion of the Radio Production Certificate of Achievement program who wish to further develop technical skills. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128B. Total of 120 hours unpaid or 150 hours paid field practice.

Grade Mode: P

**TVR 129C EXTENDED BROADCAST NEWS/
ADMINISTRATION INTERNSHIP**
2 units

Prerequisites: *TVR 024 and maintain enrollment in 7 units or more including internship.*

Enrollment Limitation: *Instructor approval.*

Extended, supervised, practical capstone experience in an industry-related professional environment. Designed for students near completion of the Broadcast Journalism Certificate of Achievement program. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128C. Total of 120 hours unpaid or 150 hours paid field practice.

Grade Mode: P

TVR 129D MUSIC RECORDING/AUDIO INTERNSHIP
2 units

Prerequisites: *TVR 103A and maintain enrollment in 7 units or more including internship.*

Supervised practical experience in an industry related professional environment. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128A, B, C, D, E, F or TVR 129A, B, C, E, F. Total of 180 hours field practice.

Grade Mode: P

TVR 129E EXTENDED TELEVISION PRODUCTION INTERNSHIP

2 units

Prerequisites: TVR 016A and maintain enrollment in 7 units or more including internship.

Enrollment Limitation: Instructor approval.

Extended, supervised, practical capstone experience in an industry related professional environment. Designed for students near completion of the Video Production Certificate of Achievement program. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128E. Total of 120 hours unpaid or 150 hours paid field practice.

Grade Mode: P

TVR 129F EXTENDED RADIO PRODUCTION INTERNSHIP

2 units

Prerequisites: TVR 014B and maintain enrollment in 7 units or more including internship.

Enrollment Limitation: Instructor approval.

Extended, supervised, practical capstone experience in an industry-related professional environment. Designed for students near completion of the Radio Production Certificate of Achievement program who wish to further develop production skills. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128F. Total of 120 hours unpaid or 150 hours paid field practice.

Grade Mode: P

TVR 129G EXTENDED POST PRODUCTION INTERNSHIP

2 units

Prerequisite: TVR 141B and TVR 144.

Enrollment Limitation: Instructor approval.

Extended, supervised, practical capstone experience in an industry-related professional environment. Designed for students near completion of the Post Production Certificate of Achievement program. **Pass/no pass** grading. **May not be taken concurrently** with TVR 128G. Total of 120 hours unpaid or 150 hours paid field practice.

Grade Mode: P

TVR 141B INTERMEDIATE DIGITAL NON-LINEAR VIDEO EDITING

2 units

Prerequisite: TVR 019 and 041 or placement based on the TVR 041 assessment process.

Intermediate theory and application of editing techniques using the Avid Editing System. Critical analysis of the editing process. Editing complex scenes. Creating visual effects. Introduction to editing system troubleshooting. Total of 18 hours lecture and 72 hours laboratory.

Grade Mode: L

TVR 142 ADVANCED NON-LINEAR EFFECTS EDITING

3 units

Prerequisite: TVR 041.

Advanced visual effects editing using the Avid Editing System. Create, enhance, modify and treat stills, motion graphics and titling sequences (Adobe Photoshop, Boris-FX). Troubleshoot system and peripheral devices and software. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L

TVR 143 DIGITAL AUDIO WORKSTATION SKILLS

3 units

Prerequisite: TVR 002A.

Theory and application of digital audio workstations used in media production and postproduction. Developing proficiency using audio design and mixing in a project based learning environment. Total of 36 hours lecture and 54 hours laboratory.

Grade Mode: L

TVR 144 DIGITAL NON-LINEAR ASSISTANT EDITING

2 units

Introductory theory and application of assistant editing techniques using the Avid Editing System. Practical application of the assistant editing process. System setup, project setup, various inputting techniques, transcoding, project organization skills, various online mixing, exporting and outputting skills and techniques. Total of 18 hours lecture and 72 hours lecture.

Grade Mode: L

THEATER ARTS

(Visual Arts and Media Studies Division)

THRT 001 INTRODUCTION TO THEATER

3 units

Introduction to theatre as an art form through exploration of theatre in production, with an emphasis on the collaborative role of theatre artists and the active role of the audience. Understanding of, and access to, live theatrical events and enhanced appreciation of the value of theatre to society; development of critical skills through consideration of representative examples of theatrical productions from numerous genres and time periods. Attendance at selected college-sponsored and professional theatre events required. **Required** instructional trips. Total of 54 hours lecture.

Transfer Credit: CSU; UC. *C-ID: THTR 111

Grade Mode: L, A

*Course Identification Numbering System (C-ID)

THRT 002A ACTING I**3 units**

This course prepares a student to apply basic acting theory to performance and develops the skills of interpretation of drama through acting. Special attention is paid to skills for performance: memorization, stage movement, vocal production, and interpretation of text. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: THTR 151*

Grade Mode: L

THRT 002B ACTING II**3 units**

Prerequisite: THRT 002A.

This course follows Acting I and continues the exploration of theories and techniques used in preparation for the interpretation of drama through acting. The emphasis will be placed on deepening the understanding of the acting process through character analysis, monologues, and scenes. Total of 36 hours lecture and 72 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: THTR 152*

Grade Mode: L

THRT 002C ADVANCED ACTING FUNDAMENTALS**3 units**

Prerequisite: THRT 002B.

Application of performance techniques and support activities for stage and camera productions. Advanced character development and the study of period styles and genres. **Recommended** enrollment in THRT 029 and 030. Total of 36 hours lecture and 72 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

THRT 004A MIME FUNDAMENTALS**2 units**

Fundamental work in developing the body as an expressive tool for non-verbal communication, ensemble work and exploration and use of space through basic pantomime technique. **No credit** if taken after THRT 004. Total of 27 hours lecture and 27 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, P

THRT 004B MIME FOR THE ACTOR**2 units**

Prerequisite: THRT 004A.

Advanced work in mime technique for the development of period or style movement for actors and performance level mime work. Total of 27 hours lecture and 27 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

THRT 005A THEATRE HISTORY I**3 units**

History of theatre from the Origins of Theatre to 1660. History and development of theatre and drama in relationship to cultural, political and social conditions of the time. Plays are read for analysis of structure, plot, character and historical relevance. **No credit** if taken after THRT 005. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: THRT 113*

Grade Mode: L

THRT 005B THEATRE HISTORY II**3 units**

Recommended Preparation: THRT 005A.

History of theatre from the Restoration Theatre to Contemporary times. History and development of theatre and drama in relationship to cultural, political and social conditions of the time. Plays are read for analysis of structure, plot, character and historical relevance. **No credit** if taken after THRT 005. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

THRT 006 PLAY WRITING**3 units**

Basic view of dramatic structure in play writing designed to develop writing skills through study of professional models, writing scenes and plays, and workshop reading of material in progress. **Recommended** THRT 002A. Total of 54 hours lecture.

Transfer Credit: CSU

Grade Mode: L, P

THRT 008 VOICE AND MOVEMENT FOR THE PERFORMER**3 units**

The development of vocal and physical expression of the performer in theater, film and television. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

THRT 009 SCRIPT ANALYSIS**3 units**

Prerequisite: THRT 002A.

Techniques for analyzing a play or film script. This class will explore a variety of methods for investigating the interrelationship of the many parts of a script (theme, structure, characters, plot, setting, etc.). The perspectives gained will guide the students in their discovery of production alternatives for all artists; actors, directors, designers, etc. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: THTR 114*

Grade Mode: L

*Course Identification Numbering System (C-ID)

THRT 010A MAKEUP FOR STAGE AND SCREEN**3 units**

Instruction and practice in a lecture/laboratory setting in all phases of makeup specifically designed for theatrical and cinematic use. Theory and practical application of makeup for stage, television and cinema. **Required** stage crew activity. Total of 54 lecture and 18 hours laboratory. This course may be scheduled using the "To Be Assigned" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: THTR 175*

Grade Mode: L

THRT 010B ADVANCED MAKEUP FOR STAGE AND SCREEN**1 unit**

Prerequisite: THRT 010A.

Recommended Preparation: THRT 030.

Students will receive instruction and practice in a lecture/laboratory setting in all phases of makeup specifically designed for theatrical and cinematic use. Theory and application of advanced techniques of makeup including hair makeup, principles of design for non-realistic makeup, mask construction and introduction to prosthesis. **Required** stage crew activity. Total of 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A, P

THRT 012A TECHNICAL THEATER**4 units**

An introduction to technical theatre and the creation of scenic elements involved in department productions. Includes basic concepts of design, set movement, prop construction and procurement, backstage organization and career possibilities. Also includes stage management, lighting and/or sound techniques. Beginning practical application. **Required** stage crew activity. **Recommended** enrollment in THRT 030. Total of 54 hours lecture and 54 hours laboratory.

*Transfer Credit: CSU; UC. *C-ID: THTR 171*

Grade Mode: L

THRT 012B ADVANCED TECHNICAL THEATER**4 units**

Prerequisite: THRT 012A.

Advanced practical application of technical theatre and in the creation of scenic elements involved in department productions. Includes continuing concepts of design, set movement, prop construction and procurement, backstage organization and career possibilities. Students are required to assume technical and production responsibility for all department productions approved by instructor. Also includes stage management, lighting and/or sound techniques. Beginning practical application. **Required** stage

crew activity. Total of 54 hours lecture and 54 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

THRT 013 INTRODUCTION TO SCENIC DESIGN**3 units**

Recommended Preparation: THRT 030 and THRT 012A.

Aspects of Theatrical Design; problems of translating a dramatic idea into stage production. Students will be offered a survey of Theatrical design and construction techniques through demonstration and lecture. Total of 54 hours lecture.

Transfer Credit: CSU; UC

Grade Mode: L

THRT 015 COSTUME CRAFTS**3 units**

Recommended Preparation: THRT 030.

Students will study costume history, design, and basic construction techniques as an introduction to basic theatrical costuming. Fabrics and their various uses will be investigated. Total of 36 hours lecture and 72 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: THTR 174*

Grade Mode: L, A

THRT 016 COMEDIC PERFORMANCE**1 unit**

Prerequisite: THRT 002A.

Exploration of techniques unique to comedy acting that include character development, emotional range, over-emphasis, under-emphasis, distortion, surprise and free association. Total of 18 hours lecture and 36 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, P

THRT 026 IMPROVISATION TECHNIQUES**2 units**

Prerequisite: THRT 002A.

Principles of improvisation techniques, development of scenes, characterization and ensemble work. Total of 27 hours lecture and 27 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, P

THRT 027 MUSICAL THEATRE PRODUCTION**3 units**

Enrollment Limitation: Audition.

Experience in all aspects of musical theatre: rehearsal and performance for cast, technical crew and instrumentalists in production of a large-scale musical. **Maximum credit:**

12 units, 3 units each semester. **Maximum of 4 enrollments** allowed in the **Musical Theater Production Family**: MUSC 067, 074, 075, THRT 075, 027. Total of 54 hours lecture and 108 hours laboratory.

Transfer Credit: CSU; UC

Grade Mode: L, A

THRT 028 STUDIO PRODUCTION – REHEARSAL AND PERFORMANCE

1 unit

Enrollment Limitation: *Audition.*

Performance participation in small-scale dramatic productions. **Maximum credit** 4 units, 1 unit each semester. Total of 72 hours laboratory. This course may be scheduled using the “To Be Arranged” (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: THTR 191*

Grade Mode: L, A

THRT 029 REHEARSAL AND PERFORMANCE

3 units

Enrollment Limitation: *Audition.*

Performance in film, television and theater performance. **Maximum credit** 12 units, 3 units each semester. Total of 144 hours of laboratory. This course may be scheduled using the “To Be Arranged” (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: THTR 191*

Grade Mode: L, A

THRT 030 STAGE TECHNIQUES

1 unit

Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews for Theatre Department productions. **Maximum credit** 4 units, 1 unit each semester. Total of 54 hours laboratory. This course may be scheduled using the “To Be Arranged” (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: THTR 192*

Grade Mode: L, A

THRT 041 FUNDAMENTALS OF STAGE LIGHTING

3 units

This course involves the study and execution of stage lighting with emphasis on equipment, control, color and their relationship to design. Required participation in rehearsals and performances. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: THTR 173*

Grade Mode: L

THRT 042 INTRODUCTION TO DESIGN FOR THEATER

3 units

Introduction to theater design with an emphasis on the design and technical elements concerned with staging live theatrical events. Survey of scenery, lighting, sound, costumes, makeup, properties, theatrical equipment and construction techniques. **Required** instructional trips and attendance of PCC productions. Total of 54 hours lecture.

*Transfer Credit: CSU; UC. *C-ID: THTR 172*

Grade Mode: L

THRT 075 MUSICAL THEATER WORKSHOP

2 units

Prerequisite: *Retention based on successful audition.*

Interdisciplinary course: Music, Theater Arts

Techniques, skills, theory and practice of musical theater performance and audition. The practice of songs, scenes and dance for performance on the live stage. **May not be taken concurrently** with or after MUSC 075. **Maximum credit** 8 units, 2 units each semester. **Maximum of 4 enrollments** allowed in the **Musical Theater Production Family**: MUSC 067, 074, 075, 076, THRT 075, 027. Total of 72 hours laboratory, 36 hours “To Be Arranged” (TBA) scheduling format.

*Transfer Credit: CSU; UC. *C-ID: MUS 180*

Grade Mode: L, A

THRT 105 BEGINNING SHAKESPEARE WORKSHOP

2 units

Scansion, interpretation, poetry, prose and performance techniques related to Shakespearean drama. Total of 27 hours lecture and 27 hours laboratory.

Grade Mode: L, A

THRT 130 PRACTICAL ACTING STUDIES

2 units

Prerequisite: *THRT 002A.*

The investigation and practical application of contemporary theories of acting as they relate to preparing for a role and their use in solving individual acting problems in film, television and theater. **Maximum credit** 6 units, 2 units each semester. Total of 27 hours lecture and 27 hours laboratory.

Grade Mode: L, A

THRT 131 INTERSESSION PRODUCTION WORKSHOP

2 units

Prerequisite: *Retention based on successful audition.*

Practical experience in theatrical or television production: acting, directing, costuming, makeup, set design and construction. **Six weeks. Summer and winter** intersessions. Total of 108 hours laboratory. This course may be scheduled using the “To Be Arranged” (TBA) scheduling format.

Grade Mode: L, A

**Course Identification Numbering System (C-ID)*

THRT 132 INTERSESSION PERFORMANCE TECHNIQUES WORKSHOP

1 unit

Various performance techniques in theater film or television. **Six weeks. Summer and winter** intersessions. Total of 54 hours laboratory. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format.

Grade Mode: L, A

WELDING

(Business and Engineering Technology Division)

WELD 044A INTRODUCTION TO GAS WELDING

1 unit

Survey of major welding processes, nomenclature, types of joints. Study of oxy-acetylene welding, brazing and cutting. Welding safety. Total of 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

WELD 044B INTRODUCTION TO ELECTRIC ARC WELDING

1 unit

Fundamentals of shielded metal arc welding; equipment, electrodes and basic procedures. Oxygen cutting. Arc welding safety. Total of 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

WELD 044C ADVANCED ARC WELDING, FCAW, SMAW

1 unit

Prerequisite: WELD 044B, WELD 200A or WELD 200B.

Techniques of out-of-position SMAW and FCAW arc welding. Emphasis will be placed on AWS D 1.1, Structural Steel SMAW and FCAW, Unlimited Thickness groove welds, in the vertical and overhead positions. Total of 54 hours laboratory.

Transfer Credit: CSU

Grade Mode: L, A

WELD 145 INTRODUCTION TO TIG WELDING

1 unit

Prerequisite: WELD 044A or WELD 044B.

Fundamentals of the Tungsten Inert Gas (TIG) or Gas Tungsten Arc (GTAW) welding process, equipment, welding of aluminum and other special metals. Filler rod selection and TIG welding safety. Total of 54 hours laboratory.

Grade Mode: L, A

WELD 150D TUNGSTEN INERT GAS (TIG) WELDING

5 units

Prerequisite: WELD 150C.

Practical application of the TIG (heli-arc) and MIG welding processes. TIG welding of steel, stainless steel and aluminum. Filler metal selection and production welding techniques. Welding safety. Total of 54 hours lecture and 126 hours laboratory.

Grade Mode: L, A

WELD 200A INTRODUCTION TO WELDING

10 units

Introduction to welding fabrication for the career welding student. Development of basic skills in oxy-acetylene welding, brazing and cutting. Emphasis on practical Shielded Metal Arc Welding (SMAW) in all positions. Blueprint reading, shop math and welding safety. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

Grade Mode: L, A

WELD 200B CONSTRUCTION TRADE WELDING

10 units

Prerequisite: WELD 200A.

Structural steel welding for the construction trades. Performance of groove welds, in all positions, using Shielded Metal Arc Welding (SMAW) and Flux Cored Arc Welding (FCAW). Class preparation for the written and practical structural certification tests. Study of welding code, destructive testing of welds, layout and fabrication practice, shop math and welding safety. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

Grade Mode: L, A

WELD 200C SEMI-AUTOMATIC AND GAS TUNGSTEN WELDING

10 units

Prerequisite: WELD 200A.

Study of advanced structural steel and aerospace welding. Class preparation of the semi-automatic light gage certification using Gas Metal Arc Welding (GMAW). Aero-space welding of steel, stainless steel and aluminum using Gas Tungsten Arc Welding (GTAW). Study of welding metallurgy, inspection and nondestructive testing, fabrication practice and welding safety. **Required** instructional trips. Total of 90 hours lecture and 270 hours laboratory.

Grade Mode: L, A

WELD 303 LAC WELDING LICENSE WRITTEN EXAM PREP

3 units

Preparation for the LAC Structural Weld License, written exam. No 'hands on' welding in this class. Emphasis on the AWS D 1.1 Structural Steel Code, welding symbols, joint design, electrode classification and general principals of

FCAW and SMAW arc welding processes. At the end of the course you will need to go through the LAC Application process to pay for and schedule your test. Total of 54 hours lecture.

Grade Mode: L, A

WELD 411 ADAPTIVE WELDING

2 units

Enrollment Limitation: *All students must have a registered disability with DSP&S.*

Introduction to welding adapted to fit the needs of students with documented physical and learning disabilities. Includes a review of the American Welding Society (AWS) D1.1 welding codebook, in preparation for taking the written portion of the L.A. City welding examination, and one-on-one guidance in developing ability to create sound welds in preparation for the practical portion of the L.A. City welding examination. Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: L, A

PASADENA CITY COLLEGE
CATALOG
2019-2020

Noncredit Division



SECTION VIII

NONCREDIT DIVISION

Administration Office
3035 East Foothill Boulevard
Pasadena, California 91107
(626) 585-3000
<http://www.pasadena.edu>

GENERAL INFORMATION

OVERVIEW

Pasadena City College's Noncredit Division offers noncredit classes and certificate programs for students seeking self-improvement, increased literacy and job skills, and access to higher education and employment.

The Board of Governors for California Community Colleges established noncredit classes and programs to provide an "educational gateway" or a "portal to the future." It serves as a key contributor to "open access" for students with diverse backgrounds and those seeking ways to improve their earning power, literacy skills, and access to higher education. For many, particularly immigrants, the economically disadvantaged, and low-skilled adults, it is the first point of entry into a college.

STUDENT SERVICES

Admissions and Records

The Admissions and Records Office admits and enrolls students into noncredit classes at the Community Education Center (CEC) on the Foothill Campus. No enrollment fees are required. The office provides a variety of services that include transcript requests, verification letters, grade reports, and issuance of high school diplomas and noncredit ESL and noncredit short-term Career and Technical Education certificates. The office maintains all student records and files. Students who intend to enroll must submit a completed online application to the Admissions and Records Office and upon acceptance, they will receive a Permit to Register, confirming the admissions process.

Students must be 18 years of age, or older, for admission to any noncredit program. A student who is younger than 18 can be admitted by filing a Student Petition, which can be obtained from the noncredit Counseling Office. A completed petition, along with an official high school transcript and letter of recommendation from a high

school counselor should be returned to the Counseling Office. Qualified students who have not yet graduated from high school may be admitted for concurrent enrollment. Credit(s) granted will be forwarded to the student's high school. Forms may be obtained in the Counseling Office.

Placement Tests and Assessment

Students are required to take a placement test if they are planning to enroll in one of the following programs: Adult High School Diploma, or English as a Second Language (ESL) program. Following the placement test a counselor will meet with the student to discuss test scores, transcript evaluation, and proper placement in a program.

Counseling

Counselors can advise students regarding educational plans, career goals, academics, and personal issues. They interpret test results, analyze interests and abilities, and refer students to needed services within the college and in the community. Although counselors assist students in long term planning and in checking specific requirements, *responsibility for meeting High School graduation and/or certificate programs completion requirements, is one which must be assumed by each student.*

INSTRUCTION

The Noncredit Division offers quality programs for students seeking self-improvement, enhanced earning power, increased literacy skills and access to higher education and employment. These include courses in English as a Second Language, Vocational English as a Second Language (VESL), Immigrant Education, Elementary and Secondary Basic Skills (Adult High School Diploma, General Education Development (GED), or Adult Basic Education), Parenting Education, Programs for Individuals with Substantial Disabilities, Business, Building Trades and Construction, Education Programs for Older Adults, and Short-term Career and Technical Education (CTE) Certificates, Graphic Design, and Medical Assisting.

I. EDUCATION PROGRAMS FOR OLDER ADULTS

Older adult education consists of a course, a course of study, or an organized sequence of courses specifically designed to offer lifelong education that provides opportunities for personal growth and development, community involvement, skills for mental and physical well-being, and economic self-sufficiency.

II. EDUCATION PROGRAMS FOR PERSONS WITH SUBSTANTIAL DISABILITIES

Education programs for persons with substantial disabilities consists of a course, a course of study, or an organized sequence of courses specifically designed to provide individuals with life-skill proficiencies that are essential to the fulfillment of academic, vocational and personal goals.

Basic Workforce Readiness for Developmentally Disabled

Certificate of Completion

The Basic Workforce Readiness for Developmentally Disabled Adults program prepares students for job search opportunities and transition to other noncredit functional skills courses or credit certificate programs. Students gain knowledge in the job application process, employee rights, interviewing techniques, time management, importance of teamwork, workplace diversity, fundamental social skills, maintaining good workplace habits and basic workplace expectations. It is recommended but not required to have a working knowledge of basic reading, writing, and math skills.

Required Courses

- DSPS 2201 – Finding the Job That's Right for You
- DSPS 2202 – Getting the Job You Want
- DSPS 2203 – Basic Social Skills: Getting Along With Others in the Workplace
- DSPS 2204 – Introduction to Your Rights and Responsibilities in the Workplace

Student Learning Outcomes:

1. Listen actively, respectfully, and critically; correctly interpret verbal instructions.
2. Identify, understand, and discuss workplace problems/situations and possible solutions.
3. Locate, discuss, and evaluate print and online resources related to workplace issues.
4. Analyze external and internal motivating factors of successful employees.

III. ELEMENTARY AND SECONDARY BASIC SKILLS

Elementary and secondary basic skills consists of a course, a course of study, or an organized sequence of courses to provide instruction for individuals in elementary and second-level reading, writing, computation, and problem-solving skills in order to assist them in achieving their academic, vocational, and personal goals. Elementary-level is generally recognized to mean that, where appropriate, the coursework addresses the content and proficiencies at levels through eighth grade. Secondary-level is generally recognized to mean that the coursework addresses the content and proficiencies at levels through the twelfth grade and may incorporate a high school diploma.

Noncredit Adult Secondary Education Program Certificates

Adult Basic Education

Certificate of Competency

The Adult Basic Education program prepares students with the essential skills for academic advancement to the adult high school diploma (AHSD) or General Educational Development (GED) programs. Students gain knowledge in language arts and mathematics. Students may advance to develop skills for the workplace and to prepare for future educational opportunities.

Required Courses

- ABE 3001 – Language Arts
- ABE 3002 – Mathematics

Student Learning Outcomes:

1. Demonstrate understanding of the concepts in English language arts and mathematics that prepare students to enter the adult high school diploma or high school equivalency such as GED certificate programs.
2. Demonstrate critical thinking skills to observe, analyze, synthesize, and evaluate ideas and information.
3. Demonstrate study skill habits that enable students to make the transition to adult high school, GED coursework and credit programs.
4. Demonstrate familiarity with subjects and concepts that are part of the adult high school or GED placement exam.
5. Demonstrate interpersonal skills to interrelate and collaborate in the workplace.
6. Demonstrate effective and ethical use of technology.

GED

Certificate of Competency

The General Education Development program prepares students for the General Education Development (GED) exam. The curriculum also prepares students for a pathway to other noncredit or credit programs. Students gain knowledge in college and career readiness, including career exploration and study skills. Services include test-taking strategies, hands-on computer practice testing, academic counseling, individual follow-up, and easy access to local GED testing center. The GED Certificate of Competency recognizes student achievement in GED preparation; however, students must pass the GED test in order to receive high school equivalency.

Required Courses

GED 4001 - Language Arts
GED 4002 - Mathematics
GED 4003 - Science
GED 4004 - Social Studies

The GED courses prepare students in four subjects (language arts, math, social studies, and science) to be able to pass the GED high school equivalency exam, which is the equivalent of a high school diploma for those who did not finish high school. It is highly recommended that students see a counselor before enrolling in the GED program to determine student level of readiness; some students may be better served in the Adult Basic Education program prior to enrolling in GED.

Student Learning Outcomes:

1. Demonstrate understanding of the concepts in language arts, mathematics, science, and social science that prepare students to pass the General Education Development (GED) exam.
2. Demonstrate critical thinking skills to observe, analyze, synthesize, and evaluate ideas and information.
3. Read with understanding and convey ideas effectively in writing.
4. Demonstrate knowledge of mathematical concepts and procedures to answer a question, solve a problem, make a prediction, or carry out a task that has a mathematical dimension.

GED (Bilingual)

Certificate of Competency

The General Education Development-Bilingual program prepares students for the General Education Development (GED) Spanish exam.

Required Courses

GED 4101 – Language Arts-Bilingual
GED 4102 – Mathematics-Bilingual
GED 4103 – Science-Bilingual
GED 4104 – Social Studies-Bilingual

Student Learning Outcomes:

1. Demonstrate understanding of the concepts in language arts, mathematics, science, and social science that prepare students to pass the General Education Development (GED) Spanish exam.
2. Demonstrate critical thinking skills to observe, analyze, synthesize, and evaluate ideas and information.
3. Read with understanding and convey ideas effectively in writing.
4. Demonstrate knowledge of mathematical concepts and procedures to answer a question, solve a problem, make a prediction, or carry out a task that has a mathematical dimension.

ADULT HIGH SCHOOL DIPLOMA

The Adult High School Diploma requires students to complete 160 units for graduation, which includes coursework in Natural Sciences, Social and Behavioral Sciences, Humanities, English, Mathematics, and a selection of listed electives. Based on information such as student's high school grades, test scores, work experience, and other multiple measures, the counselor may recommend placement at the level which meets the student's needs. Students are awarded a high school diploma upon completion of the course of study prescribed by the State of California and the Pasadena Area Community College District.

AHSD 6401 – Fundamentals of Grammar A
AHSD 6402 – Fundamentals of Grammar B
AHSD 6403 – Essentials in Writing A
AHSD 6404 – Essentials in Writing B
AHSD 6405 – U.S. Literature
AHSD 6406 – British Literature
AHSD 6407 – Reading Fundamentals
AHSD 6411 – U.S. History: Pre-Colonialism to the Civil War
AHSD 6412 – U.S. History: Reconstruction to Present
AHSD 6413 – Introduction to American Government
AHSD 6414 – Introduction to Economics
AHSD 6415 – Contemporary American Social Issues
AHSD 6416 – Global Affairs
AHSD 6417 – World Geography
AHSD 6421 – Math Basics
AHSD 6422 – Mathematics Pre-Algebra

AHSD 6423 – Algebra IA
 AHSD 6424 – Algebra IB
 AHSD 6426 – Life Science - Biology
 AHSD 6427 – Life Science - Physiology
 AHSD 6428 – Physical Science - Chemistry
 AHSD 6429 – Physical Science - Physics
 AHSD 6432 – Art History
 AHSD 6436 – Music Appreciation
 AHSD 6439 – Contemporary Spanish

Recommended Electives

AHSD 6400 – Practical English Skills
 AHSD 6409 – Introduction to Creative Writing
 AHSD 6430 – Environmental Science - Ecology
 AHSD 6431 – Computer Basics
 AHSD 6433 – Workplace Skills for the 21st Century
 AHSD 6434 – Planning for Academic and Career Success
 AHSD 6435 – Health
 AHSD 6437 – Graphic Art Design
 AHSD 6438 – Computer Applications

Program Outcomes:

1. Develop critical thinking skills to observe, analyze, synthesize, and evaluate ideas and information orally and in writing.
2. Identify concepts that are part of the exit exam.
3. Develop interpersonal skills to interrelate and collaboratively work with others.
4. Integrate effective and ethical use of technology in personal practices.
5. Utilize study skill habits that will enable students to make the transition to college level coursework.
6. Apply concepts learned in core subjects that will prepare students to earn a high school diploma and transition to the community college and into the workplace.

Certificate of Completion in Secondary Education

Students who complete the Adult High School Diploma Program are also eligible for a Certificate of Completion in Secondary Education.

IV. ENGLISH AS A SECOND LANGUAGE (ESLN)

ESLN consists of a course, a course of study, or an organized sequence of courses. There are six new certificate programs of competency organized in a sequence to provide instruction in the English language to adult, non-native English speakers with varied academic, vocational, and personal goals. Individuals whose primary language is not English may also prepare with stand-alone courses in

the integrated skills of listening, speaking, reading, and writing.

Program Outcomes:

1. Students will be able to relate in various types of oral performance, conversation, and presentation.
2. Students will be able to interpret various types of literature, including authentic materials.
3. Students will be able to compose grammatically correct, well organized paragraphs and summaries of reading materials.

The Noncredit ESL Program curriculum provides intensive English Language instruction in Literacy to High-Intermediate level integrated courses (Levels 0-5). The program also offers four elective courses including Grammar, Conversation, American Culture, and Writing. The program provides students with increased opportunities for successful employment and academic achievement. The ESL Bridge Program helps students seamlessly transition to credit ESL classes.

Noncredit ESL Program Certificates

ESL Literacy

Certificate of Competency

This curriculum provides intensive English as a Second Language integrated instruction in reading, writing, listening and speaking to low literacy to high literacy students. The program introduces basic English components such as the alphabet, numbers, basic grammatical functions, pronunciation and production of short and simple phrases. It prepares students for the ESL Level 1 Program.

Required Courses

ESLN 1060A – English as a Second Language, Literacy Level A
 ESLN 1060B – English as a Second Language, Literacy Level B

Student Learning Outcomes:

1. Students will be able to select and verbally produce appropriate simple phrases to answer simple questions given orally.
2. Students will be able to collect print media needed to solve problems.
3. Students will be able to compose simple phrases in response to oral directions or simple questions.

ESL Level 1

Certificate of Competency

This curriculum provides intensive English as a Second Language integrated instruction in reading, writing,

listening and speaking to high literacy students to low beginning level students. The program prepares students to participate in simple conversations, complete basic forms and write simple sentences. It prepares students for the ESL Level 2 Program.

Required Courses

ESLN 1061A – English as a Second Language, Level 1A
ESLN 1061B – English as a Second Language, Level 1B

Student Learning Outcomes:

1. Students will be able to evaluate information being presented and requested while participating in basic conversations about personal experiences.
2. Students will be able to decipher basic print and predict or select responses to questions in text, forms or in oral discourse.
3. Students will be able to formulate simple sentences based on personal experience or simple themes.

ESL Level 2

Certificate of Competency

This curriculum provides intensive English as a Second Language integrated instruction in reading, writing, listening and speaking for low beginning to high beginning students. The program instructs students in simple oral and written communication form such as listening for specific information, writing simple paragraphs and asking clarifying questions. It prepares students for the ESL Level 3 Program.

Required Courses

ESLN 1062A – English as a Second Language, Level 2A
ESLN 1062B – English as a Second Language, Level 2B

Student Learning Outcomes:

1. Students will be able to assess meaning from simple recordings and conversations.
2. Students will be able to estimate meaning from text presented in a variety of written media.
3. Students will be able to produce compound sentences to write simple paragraphs on different themes.

ESL Level 3

Certificate of Competency

This curriculum provides intensive English as a Second Language integrated instruction in reading, writing, listening and speaking for high beginning to low intermediate students. The program introduces complex

language functions such as identifying problems and discussing solutions, writing a descriptive paragraph and using comprehensive language to fulfill tasks. It prepares students for the ESL Level 4 Program.

Required Courses

ESLN 1063A – English as a Second Language, Level 3A
ESLN 1063B – English as a Second Language, Level 3B

Student Learning Outcomes:

1. Students will be able to select information presented in a conversation and correlate it to solutions to problems.
2. Students will be able to apply scanning skills in written text to determine theme or topic.
3. Students will be able to formulate complex sentences into a paragraph using appropriate verb tense.

ESL Level 4

Certificate of Competency

This curriculum provides intensive English as a Second Language integrated instruction in reading, writing, listening and speaking for low intermediate to high intermediate students. The program helps student develop extended oral fluency and written competency beyond that of personal experiences to global situations. It prepares students for the ESL Level 5 Program.

Required Courses

ESLN 1064A – English as a Second Language, Level 4A
ESLN 1064B – English as a Second Language, Level 4B

Student Learning Outcomes:

1. Students will be able to engage in and initiate conversations with native speakers.
2. Students will be able to identify and solve problems presented in passages containing complex sentences.
3. Students will be able to compose and vary the content of written paragraphs in a real-world context.

ESL Level 5

Certificate of Competency

This curriculum provides intensive English as a Second Language integrated instruction in reading, writing, listening and speaking to high intermediate students. The program prepares students to organize and use correct grammatical functions in oral and written communication in academic, work and life situations.

Required Courses

ESLN 1065A – English as a Second Language, Level 5A
ESLN 1065B – English as a Second Language, Level 5B

Student Learning Outcomes:

1. Students will be able to differentiate correct sentence structure from incorrect structure when communicating orally with native speakers.
2. Students will be able to analyze different types of written materials using reading strategies.
3. Students will be able to write organized paragraphs using correct syntax.

ESL Family Literacy

Certificate of Competency

The ESL Family Literacy program prepares beginning-high to intermediate-low ESL students to participate more effectively in their children's education. Topics include reading with children, parental involvement in local schools, importance of school attendance, kinder readiness, helping children with homework, and basic college readiness and financial aid information.

Required Courses

ESLN 2050 – ESL Family Literacy Module, A
ESLN 2051 – ESL Family Literacy Module, B

Student Learning Outcomes:

1. Demonstrate understanding of the K-12 educational system.
2. Demonstrate proficiency in oral and written skills necessary for interaction in an English-speaking school environment.
3. Read with an understanding to assist school-age children with homework.
4. Demonstrate basic knowledge of college and financial aid terminology.

ESLN Intermediate Oral Communication Skills

Certificate of Competency

The ESLN Intermediate Oral Communication Skills certificate program is designed for beginning-high to intermediate ESLN students who seek to improve their listening and speaking skills in American English in order to achieve more effective communication at work, school and in the community. The program includes targeted instruction and practice in listening comprehension, pronunciation, and conversation strategies.

Required Courses

ESLN 1072 – Intermediate Conversation
ESLN 1082 – Introduction to Pronunciation

Student Learning Outcomes:

1. Demonstrate ability to comprehend spoken English in a variety of real-life situations and recorded media, involving basic to intermediate vocabulary and grammatical structures.
2. Express ideas orally in a clear manner using appropriate pronunciation, non-verbal cues, grammatical structures and vocabulary.
3. Recognize and utilize the fundamental features of stress, rhythm, intonation and connected speech to effectively communicate in everyday situations at work, school and in the community.

ESLN Intermediate Written Communication Skills

Certificate of Competency

The ESLN Intermediate Written Communication Skills certificate is designed for beginning-high to intermediate ESLN students who seek targeted instruction in vocabulary, reading, grammar and writing in order to achieve more effective formal and informal written communication skills for academic, employment and personal purposes.

Required Courses

ESLN 1092 – Intermediate Grammar Review
ESLN 1102 – Basic-Intermediate Writing Skills
ESLN 1112 – Intermediate Reading & Vocabulary

Student Learning Outcomes:

1. Correctly identify and use basic English grammar and sentence structures.
2. Demonstrate effective use of vocabulary decoding and retention strategies.
3. Demonstrate effective use of reading comprehension skills with short, simple readings in a variety of genres.
4. Create complete, well-constructed and well-organized sentences and paragraphs for use in a variety of informal and formal contexts.
5. Type written work using computer software, including word processing, email, and the PCC Learning Management System.

ESLN Advanced Oral Communication Skills

Certificate of Competency

The ESLN Advanced Oral Communication Skills certificate program is designed for intermediate to advanced ESLN

students who seek to improve their listening and speaking skills in American English in order to achieve more effective communication at work, school and in the community. The program includes targeted instruction and practice in advanced skills in listening comprehension, pronunciation, conversation strategies, and oral presentations, within the context of advanced vocabulary and grammar structures.

Required Courses

ESLN 1074 – Advanced Conversation

ESLN 1084 – Advanced Pronunciation

Student Learning Outcomes:

1. Demonstrate ability to comprehend spoken English in a variety of real-life situations and recorded media.
2. Express simple and complex ideas orally in a clear manner using appropriate pronunciation, grammar, vocabulary, and interpersonal and intercultural communication strategies.
3. Effectively use prosodic features, such as stress, rhythm, prominence, thought groups, intonation, linking and reduced speech, in informal and formal speech contexts involving intermediate to advanced vocabulary and structures.

ESLN Advanced Written Communication Skills

Certificate of Competency

The ESLN Advanced Written Communication Skills certificate is designed for intermediate to advanced ESLN students who seek targeted instruction in advanced vocabulary, reading, writing, and grammar in order to achieve more effective formal and informal written communication skills for academic, employment and personal purposes.

Required Courses

ESLN 1094 – Advanced Grammar Review

ESLN 1104 – Advanced Writing Skills

ESLN 1114 – Advanced Reading & Vocabulary

Student Learning Outcomes:

1. Recognize and use advanced grammar rules, usage patterns and sentence structures to effectively communicate complex ideas.
2. Demonstrate vocabulary decoding and retention strategies for learning advanced vocabulary for academic, employment, and personal contexts
3. Create a well-organized paragraph and a complete, well-constructed 5-paragraph standard essay.

Additional Noncredit ESL Courses:

ESLN 1010 – ESL Level 1

ESLN 1010A – ESL Level 1 Condensed

ESLN 1015 – ESL Level 2

ESLN 1015A – ESL Level 2 Condensed

ESLN 1020 – ESL Level 3

ESLN 1020A – ESL level 3 Condensed

ESLN 1030 – ESL Level 4

ESLN 1030A – ESL Level 4 Condensed

ESLN 1031 – ESL Level 5

ESLN 1040 – ESL Conversation

ESLN 1040A – ESL Level 5 Condensed

ESLN 1050 – ESL American Culture

ESLN 1051 – ESL Basic Writing Skills

ESLN 1052 – ESL Grammar Review and Vocabulary Development

ESLN 2052 – ESL for Health Sciences

V. VOCATIONAL ENGLISH AS A SECOND LANGUAGE (ESLV)

ESLV consists of a course, a course of study, or set of courses. There are five new certificate programs of competency to provide instruction in the English language to adult, non-native English speakers with specific vocational goals.

Noncredit ESLV Program Certificates

VESL Child Care Provider

Certificate of Competency

The VESL Child Care Provider program prepares beginning-high to intermediate-low ESL students for careers in child care. The curriculum also serves as a pathway to other noncredit CTE certificates, and credit child development programs. Students gain knowledge in essential vocabulary for understanding basics of child growth and development, communicating with parents or future employers, health and safety, and duties of child care providers.

Required Courses

ESLV 3000 – VESL: Child Care Provider, Module A

ESLV 3001 – VESL: Child Care Provider, Module B

Student Learning Outcomes

1. Identify basic child care terminology such as common child care items, hazards, reporting incidents, health and safety.
2. Incorporate child development vocabulary, speaking and writing to be prepared to work in a child centered environment.
3. Summarize appropriate developmental stages to effectively orally communicate in a child care setting.

4. Understand basic work ethics such as teamwork and appropriate workplace behavior.
5. Engage in basic interviewing and job search skills for a child care setting.

VESL Green Construction

Certificate of Competency

The VESL Green Construction program prepares beginning-high to intermediate-low ESL students for careers in green construction. The curriculum also serves as a pathway to noncredit and credit CTE programs. Students gain knowledge in essential vocabulary for communicating in a building trades and construction industry job, understanding verbal and written directions, worker rights, and safety on the job.

Required Courses

ESLV 1012 – VESL: Green Construction, Module A

ESLV 1013 – VESL: Green Construction, Module B

Student Learning Outcomes:

1. Identify basic job terminology such as safety rules, construction equipment and worker rights.
2. Demonstrate effective communication skills between employees, employer or clients.
3. Analyze construction plans for best practices in green construction.
4. Understand basic work ethics such as teamwork and appropriate workplace behavior.
5. Engage in basic interviewing and job search skills for the building trades and construction industry.

VESL Green Housekeeping

Certificate of Competency

The VESL: Green Housekeeping program prepares beginning-high to intermediate-low ESL students for careers in green housekeeping. The curriculum also serves as a pathway to other noncredit programs. Students gain knowledge in essential vocabulary for communicating in a housekeeping industry job, understanding verbal and written directions, worker rights, and safety on the job.

Required Courses

ESLV 1014 – VESL: Green Housekeeping, Module A

ESLV 1015 – VESL: Green Housekeeping, Module B

Student Learning Outcomes:

1. Identify basic job terminology such as safety rules, housekeeping equipment and worker rights.

2. Demonstrate effective communication skills between employees, employer or clients.
3. Identify best practices in green housekeeping.
4. Understand basic work ethics such as teamwork and appropriate workplace behavior.
5. Engage in basic interviewing and job search skills for green housekeeping.

VESL Green Landscaping and Gardening

Certificate of Competency

The VESL: Green Landscaping and Gardening program prepares beginning-high to intermediate-low ESL students for careers in landscaping and gardening. The curriculum also serves as a pathway to noncredit and credit CTE programs. Students gain knowledge on essential vocabulary used in communicating in the landscaping and gardening industry, understanding verbal and written directions, plant identification and placement, and safety on the job.

Required Courses

ESLV 2030 – VESL: Green Landscaping and Gardening, Module A

ESLV 2031 – VESL: Green Landscaping and Gardening, Module B

Student Learning Outcomes:

1. Appropriately use landscaping terminology such as plant identification, power tool safety, and landscape design.
2. Comprehend and respond to verbal and written directions when interacting with landscape personnel and customers.
3. Analyze landscaping plans and describe best practice plant placement.
4. Understand basic work ethics such as teamwork and appropriate workplace behavior.
5. Engage in basic interviewing and job search skills for the landscaping and gardening industry.

VESL Health Care

Certificate of Competency

The VESL Health Care program prepares beginning-high to intermediate-low ESL students for careers in healthcare. The curriculum also serves as a pathway to noncredit and credit CTE programs. Students gain knowledge on essential vocabulary used in communicating in the healthcare field, understanding verbal and written directions, medical emergencies, CPR/First Aid, safety, and basic patient needs.

Required Courses

ESLV 4000 – VESL: Health Care, Module A
ESLV 4001 – VESL: Health Care, Module B

Student Learning Outcomes:

1. Identify basic job terminology such as that related to HIPPA (Health Insurance Portability and Accountability Act), basic life stages of humans, and duties and skills of medical assistants and personal care attendants.
2. Effective communication skills between employees, with employer or with patients.
3. Understand basic work ethics such as teamwork and appropriate workplace behavior.
4. Demonstrate English language job readiness skills through job application and interviewing skills.

VESL Work Readiness and Communication Skills

Certificate of Competency

The VESL Work Readiness and Communication Skills certificate program provides instruction in the English language and cultural skills needed to successfully obtain and maintain employment and achieve career success in the United States. Students will improve their listening, speaking, reading, writing, grammar, vocabulary, critical thinking and problem solving skills by engaging in a variety of hands-on learning activities as well as individual and team projects. The program is designed for individuals at an intermediate to advanced level of English (ESLN Levels 4, 5 and above) who plan to seek employment within 3 to 6 months.

Required Courses

ESLV 5000 – VESL Work Readiness and Communication Skills, Module A
ESLV 5001 – VESL Work Readiness and Communication Skills, Module B

Student Learning Outcomes:

1. Demonstrate effective job application skills at the career planning, job search, application, and interview stages.
2. Read, interpret and complete common workplace documents and forms.
3. Demonstrate effective on-the-job communication and cultural competency skills in interactions with employers, co-workers and clients/customers.
4. Understand and successfully engage in activities involving teamwork, critical thinking, problem solving, conflict resolution and ethics.

VI. IMMIGRANT EDUCATION

Immigrant Education consists of a course, a course of study, or an organized sequence of courses specifically designed to provide immigrants and their families with the opportunity to become active and participating members of economic and civic society, and may include preparation for citizenship.

VII. PARENTING EDUCATION

Parenting education consists of a course, a course of study, or an organized sequence of courses specifically designed to offer lifelong education in parenting (parent and child relationships, parent cooperative preschools), child growth and development, and family relations in order to enhance the quality of home, family, career, and community life.

VIII. SHORT-TERM

CAREER AND TECHNICAL EDUCATION

Short-term CTE programs with high employment consist of a course of study or an organized sequence of courses leading to a vocational/career technical objective, certificate, or award that prepares students for immediate employment or transition into credit CTE upon completion of the program.

Basic Graphic Design

Certificate of Completion

The Basic Graphic Design program provides students with the essential skills and workforce preparation needed for careers in graph design. The curriculum also prepares students for a pathway to credit graphic design programs. Students gain knowledge in fundamentals of typography, design principles, website creation, project management, digital techniques, workplace diversity, and portfolio development.

Required Courses

GRFN 3001 – Basic Graphic Design
GRFN 3002 – Fundamentals of Graphics and Production

Student Learning Outcomes:

1. Understand the basic digital workflow for graphic design projects.
2. Learn basic copyright laws for the visual arts.
3. Develop a professional resume, business cards and letterhead design.
4. Produce and design a logo, a newsletter, a poster, and folded brochure, and multiple page publication from concept to completion.
5. Conduct a job search and gain familiarity with the types of jobs available in the graphic design industry.

Child Care Provider

Certificate of Completion

The Child Care Provider Program provides introductory training and education in child development for students interested in a career in early childhood education, and working with children ages birth through five. The curriculum also prepares students for a pathway to credit child development programs. Students gain knowledge in developmentally appropriate practices, creating lesson plans, optimal learning environments, health and safety guidelines, culturally relevant curriculum development, and CPR/First Aid training.

Required Courses

CHDN 1100 – Introduction to Teaching Young Children

CHDN 1101 – Introduction to Home, School and Community Relations

CHDN 1102 – Basic Skills for Child Care Provider

Student Learning Outcomes:

1. Create a safe, healthy, developmentally appropriate learning environment.
2. Develop positive relationships with diverse families, school and community.
3. Support developmentally appropriate practices and all relevant curriculum standards.
4. Demonstrate knowledge of basic principles of child growth and development.
5. Identify components and work ethic required for professional participation in an early childhood setting.

Family Home Child Care Provider

Certificate of Completion

The Family Home Child Care Provider program provides students with the essential skills and workforce preparation needed for careers in child care. The curriculum also prepares students for a pathway to credit child development programs. Students gain knowledge in procedures for developing and licensing diverse family child homes, culturally relevant curriculum, child development theories and, CPR/First Aid training.

Program Outcomes:

1. Understand California State requirements for opening and operating a quality family home child care.
2. Design a safe, healthy, developmentally appropriate family home child care environment.
3. Develop positive relationships with diverse families, children and community.
4. Support developmentally appropriate practices and all relevant curriculum standards.

5. Demonstrate knowledge of basic principles of child growth and development.
6. Identify components and work ethic required for professional participation in a family home child care setting.

Required Courses

CHDN 4000 – Family Home Child Care Provider:
Introduction to Child Development

CHDN 4001 – Family Home Child Care Provider:
Culturally Relevant Curriculum

CHDN 4002 – Family Home Child Care Provider:
Licensing and Workforce Readiness

Family Home Child Care Provider - Bilingual

Certificate of Completion

The Family Home Child Care Provider-Bilingual program provides students with the essential skills and workforce preparation needed for careers in child care. The curriculum also prepares students for a pathway to credit child development programs. Students gain knowledge in procedures for developing and licensing diverse family child homes, culturally relevant curriculum, child development theories, and CPR/First Aid training.

Required Courses

CHDN 4100 – Family Home Child Care Provider:
Introduction to Child Development-
Bilingual

CHDN 4101 – Family Home Child Care Provider:
Culturally Relevant Curriculum-Bilingual

CHDN 4102 – Family Home Child Care Provider:
Licensing and Workforce Readiness-
Bilingual

Student Learning Outcomes:

1. Understand California State requirements for opening and operating a quality family home child care.
2. Design a safe, healthy, developmentally appropriate family home child care environment.
3. Develop positive relationships with diverse families, children and community.
4. Support developmentally appropriate practices and all relevant curriculum standards.
5. Demonstrate knowledge of basic principles of child growth and development.

Introduction: Legal Interpretation & Translation

Certificate of Completion

The Introduction: Legal Interpretation/Translation Program provides students with the essential skills and

workforce preparation needed for careers in the legal field. The curriculum also prepares students for a pathway to credit paralegal, legal or administration of justice programs. Students gain knowledge in legal translation and interpretation for court proceedings, working in a multilingual legal system, simultaneous translations, and judicial certification requirements.

Required Courses

PLGN 1001 – Introduction: Legal Interpretation & Translation, Module A

PLGN 1002 – Introduction: Legal Interpretation & Translation, Module B

Student Learning Outcomes:

1. Interpret and formulate vocabulary used in legal translation and interpretation during court proceedings.
2. Demonstrate basic sight translation, simultaneous, and consecutive interpretation skills.
3. Identify career and job opportunities as translator/interpreter in different fields, and plan for professional judicial certifications.

Introduction: Medical Interpretation & Translation

Certificate of Completion

The Introduction: Medical Interpretation/Translation program provides students with the essential skills and workforce preparation needed for careers in medical interpretation. The curriculum also prepares students to transition to credit health programs. Students gain knowledge in medical translation and interpretation for medical visits and procedures, working in a multilingual medical system, simultaneous translations, and medical translation certification requirements.

Required Courses

MAN 1001 – Introduction: Medical Interpretation & Translation, Module A

MAN 1002 – Introduction: Medical Interpretation & Translation, Module B

Student Learning Outcomes:

1. Interpret and formulate vocabulary used in medical translation and interpretation during medical visits and procedures.
2. Demonstrate basic Sight Translation, Simultaneous, and Consecutive Interpretation skills.
3. Identify career and job opportunities as translator/interpreter in different fields, and plan for professional state or federal medical translation certifications.

Medical Front Office Clerk

Certificate of Completion

The Medical Front Office Clerk program provides students with the necessary preparation for entry-level positions in a medical front office setting. The curriculum also prepares students for a pathway to credit medical assisting programs. Student gain knowledge in medical terminology, medical billing and coding, software applications, administrative duties, legal requirements on reporting and patient privacy, communication, customer service, medical transcription, and workplace diversity.

Required Courses

MAN 5000 – Medical Front Office Clerk: Office Procedures

MAN 5001 – Software Applications for Medical Front Office Settings

Student Learning Outcomes:

1. Apply critical thinking as it is used in a medical management program for a medical front office setting.
2. Demonstrate use of a computer, software programs, copier, facsimile machine and security.
3. Utilize computer software to maintain office systems and patient demographic information used in a medical front office setting.
4. Demonstrate basic clerical functions and work ethics applicable in a medical front office setting.
5. Establish and maintain confidential medical records and document administrative information for a medical front office setting.

Personal Care Attendant

Certificate of Completion

The Personal Care Attendant program provides students with the essential skills and workforce preparation needed for careers as personal care attendants. The curriculum also prepares students for a pathway to credit health programs. Student gain knowledge in causes of dementia, principles of end-of-life care, cultural diversity, caregiver ethics and skills, medical guidelines, and utilizing key community resources.

Required Courses

PCAN 3000 – Personal Care Attendant I: Basic Care

PCAN 3001 – Personal Care Attendant II: Dementia and End of Life Care

Student Learning Outcomes:

1. Apply health care related terms and procedures comfortably in situations commonly encountered during employment as a personal care assistant.
2. Differentiate between responses to dementia, including Alzheimer's disease, and scenarios to select the course most beneficial to the patient.
3. Categorize local health care facilities based on their resources for patients and the families of patients.

Pre-Apprenticeship in Building Trades and Construction Industry*Certificate of Completion*

The Pre-Apprenticeship in Building Trades and Construction Industry program provides students with the essential skills and workforce preparation needed for careers in the building trades and construction industry. The curriculum also prepares students for a pathway to credit construction programs. Students gain knowledge in reading construction plans, material handling equipment, green construction, interpreting trade technical calculations, and practicing safety construction techniques according to Occupational Safety and Health Administration (OSHA) standards.

Required Courses

BLDN 2300 – Introduction to Occupational Safety and Health for the Building Trades
BLDN 2301 – Introduction to the Building Trades and Construction Industry
BLDN 2302 – Basic Construction Math for the Building Trades and Construction Industry
BLDN 2303 – Introduction to Plan Reading for the Building Trades and Construction Industry
BLDN 2304 – Basic Material Handling and Rigging

Student Learning Outcomes:

1. Safely handle basic construction material and equipment in the workplace.
2. Explain, demonstrate, and utilize the basic elements of tools related to building and construction.
3. Understand basic arithmetic and apply basic geometry in solving for construction quantities.
4. Describe and explain plan reading and interpret building codes used in construction.
5. Perform effective job searching skills through networking, outreach services and trade unions.

Pre-Apprenticeship in Building Trades and Construction Industry – Bilingual*Certificate of Completion*

The Pre-Apprenticeship in Building Trades and Construction Industry program provides students with the essential skills and workforce preparation needed for careers in the building trades and construction industry. The curriculum also prepares students for a pathway to credit construction programs. Students gain knowledge in reading construction plans, material handling equipment, green construction, interpreting trade technical calculations, and practicing safety construction techniques according to Occupational Safety and Health Administration (OSHA) standards.

Program Outcomes:

1. Safely handle basic construction material and equipment in the workplace.
2. Explain, demonstrate, and utilize the basic elements of tools related to building and construction.
3. Understand basic arithmetic and apply basic geometry in solving for construction quantities.
4. Describe and explain plan reading and interpret building codes used in construction.
5. Perform effective job searching skills through networking, outreach services and trade unions.

Required Courses

BLDN 4300 – Introduction to Occupational Safety and Health for the Building Trades - Bilingual
BLDN 4301 – Introduction to the Building Trades and Construction Industry - Bilingual
BLDN 4302 – Basic Construction Math for the Building Trades and Construction Industry - Bilingual
BLDN 4303 – Introduction to Plan Reading for the Building Trades and Construction Industry - Bilingual
BLDN 4304 – Basic Material Handling and Rigging - Bilingual

NONCREDIT BUSINESS PROGRAM

The curriculum prepares students for entry/intermediate-level clerical jobs and/or transitions into a credit business information technology program. Program will also enable students to make a seamless transition into a credit course or program.

Noncredit Business Program Certificates

Basic Bookkeeping Assistant

Certificate of Completion

The Basic Bookkeeping Assistant program provides students with the essential skills and workforce preparation needed for careers in accounting office support occupations. The curriculum also prepares students for a pathway to credit business programs. Students gain knowledge in the basics of accounting bookkeeping, payroll and financial statements.

Required courses:

BUSN 7508 – Quickbooks Essentials
BUSN 7308 – Basic Bookkeeping
or BUSN 7509 – Payroll Essentials

Student Learning Outcomes:

1. Effectively manage and record daily business transactions and payroll following accounting principles and federal /state regulations.
2. Develop an understanding of financial statements.

Business Office Systems

Certificate of Completion

The curriculum prepares students for entry/intermediate-level clerical jobs and/or transitions into a credit business information technology program. Program covers three disciplines: Clerical/Receptionist, Administrative Assistant, and Bookkeeping. Program will also enable students to make a seamless transition into a credit course or program.

Required courses:

BUSN 2601A – Computer Keyboarding A
BUSN 2601B – Computer Keyboarding B
BUSN 7301 – Microsoft Windows Essentials
BUSN 7302 – Microsoft Word Essentials for the Workplace
BUSN 7303 – Microsoft Excel Essentials for the Workplace
BUSN 7304 – Fundamentals of Office Records Management and Filing
BUSN 7305 – Basic Business English and Communications
BUSN 7306 – Career Skills for the Workplace
BUSN 7307 – Basic Business Math
BUSN 7308 – Basic Bookkeeping

Student Learning Outcomes:

1. Demonstrate knowledge of effective study skills, workplace skills, and interviewing techniques
2. Effectively communicate, verbally and in written form, in a business office setting.
3. Efficiently use and/or integrate the Microsoft Office Suite of products in a business office environment.

Computer Keyboarding

Certificate of Completion

The Computer Keyboarding program provides students with the essential skills and workforce preparation needed for careers in office administration. The curriculum also prepares students for a pathway to a credit business programs. Students gain knowledge in learning correct fingering, speed, accuracy, editing, proofreading and formatting skills.

Required Courses

BUSN 2601A – Computer Keyboarding A
BUSN 2601B – Computer Keyboarding B
BUSN 7301 – Computer Microsoft Windows Applications

Student Learning Outcomes:

1. Use Microsoft Windows to organize, retrieve, and manipulate digital stored on a computer.
2. Demonstrate proper keyboarding techniques using the touch method.
3. Develop ore touch-typing speed (35-45 wpm) and accuracy.

Computer Keyboarding – Bilingual

Certificate of Completion

The Computer Keyboarding-Bilingual program provides students with the essential skills and workforce preparation needed for careers in office administration. The curriculum also prepares students for a pathway to credit business programs. Students gain knowledge in learning correct fingering, speed, accuracy, editing, proofreading and formatting skills.

Required Courses

BUSN 7310 – Computer Microsoft Windows Applications-Bilingual
BUSN 2611A – Computer Keyboarding A - Bilingual
BUSN 2611B – Computer Keyboarding B - Bilingual

Student Learning Outcomes:

1. Use Microsoft Windows to organize, retrieve and manipulate digital data stored on a computer.
2. Demonstrate proper keyboarding techniques using the touch method.
3. Develop more touch-typing speed (35-45 wpm) and accuracy.

Computer Skills

Certificate of Completion

The Computer Skills program provides students with the essential skills and workforce preparation needed for careers

in office administration. The curriculum also prepares students for a pathway to credit business programs. Students gain knowledge in learning MS Office applications, such as WORD, Excel and Keyboarding.

Required Courses

BUSN 7301 – Computer Microsoft Windows Applications
BUSN 7302 – Business Office Computer Applications /
Basic Word
BUSN 7303 – Business Office Computer Applications/
Basic Excel
BUSN 2601A – Computer Keyboarding A

Student Learning Outcomes:

1. Use Windows software applets effectively.
2. Create, format, save, print and organize documents using files folders.
3. Prepare, edit and print and format workbooks.
4. Demonstrate proper keyboarding techniques using the touch method.

Computer Skills 2

Certificate of Completion

The Computer Skills 2 program provides students with the essential skills and workforce preparation needed for careers in office administration. The curriculum also prepares students for pathways and with skills to be successful in credit business programs. Students gain knowledge in business applications of Microsoft Office applications, such as PowerPoint, Access, and Outlook.

Student Learning Outcomes:

1. Apply appropriate Access features to effectively manage and retrieve information stored in a database.
2. Effectively develop, organize, present, and deliver information using a presentation software.
3. Effectively develop, organize, and deliver information using an email management program.

Requirements for the Certificate of Completion:

Required Courses

BUSN 7402 – Microsoft PowerPoint Essentials
BUSN 7403 – Microsoft Access Essentials for the Workplace
BUSN 7404 – Microsoft Outlook Essentials for the Workplace

General Office Clerk

Certificate of Competency

The General Office Clerk program provides students with the essential skills and workforce preparation needed for careers in office administration careers. The curriculum also prepares students to transition to credit business programs. Students gain knowledge in learning MS Office

applications, office records management, business English and communications, and keyboarding.

Required Courses

BUSN 7301 – Computer Microsoft Windows Applications
BUSN 7304 – Office Records Management and Filing
BUSN 7305 – Basic Business English and
Communications
BUSN 2601A – Computer Keyboarding A

Student Learning Outcomes:

1. Use Windows software applets effectively.
2. Index, code and file cards and correspondence in alphabetic, numeric, subject, and geographic systems.
3. Evaluate a variety of business letters, memorandum, and emails, applying effective and appropriate business writing principles, psychological approaches, and languages.
4. Touch type 25-30 words per minute, with five or fewer errors in a document

Introduction to Starting a Small Business

Certificate of Completion

The Introduction to Starting a Small Business program provides students with the essential skills and workforce preparation to start and manage a small business. The curriculum also prepares students for a pathway to credit business programs. Students gain knowledge in fundamentals of starting a small business, workplace diversity, business management, financing and business plan development.

Required Courses

BUSN 4001 – How to Start Your Own Small Business
BUSN 4002 – Managing a Small Business
BUSN 4003 – Financing a Small Business
BUSN 4004 – Developing a Small Business Plan

Student Learning Outcomes:

1. Demonstrate knowledge of a small business operations and procedures.
2. Define and explain the major management functions of a small business.
3. Identify the costs required for small business startup.
4. Demonstrate steps of effective business plan preparation

Introduction to Starting a Small Business – Bilingual

Certificate of Completion

The Introduction to Starting a Small Business Bilingual

program provides students with the essential skills and workforce preparation to start and manage a small business. The curriculum also prepares students for a pathway to credit business programs. Students gain knowledge in fundamentals of starting a small business, workplace diversity, business management, financing and business plan development.

Required Courses

BUSN 4401 – How to Start Your Own Small Business - Bilingual
BUSN 4402 – Managing a Small Business - Bilingual
BUSN 4403 – Financing a Small Business - Bilingual
BUSN 4404 – Developing a Small Business Plan - Bilingual

Student Learning Outcomes:

1. Demonstrate knowledge of a small business operations and procedures.
2. Define and explain the major management functions of a small business.
3. Identify the costs required for small business startup.
4. Demonstrate steps of effective business plan preparation.

Workplace Readiness

Certificate of Completion

The Workplace Readiness program provides students with the essential tools and techniques for entering the workforce and/or improving employability skills. Student gains knowledge in effective job searches, writing resumes and cover letters, interviewing techniques, appropriate workplace behaviors, diversity in the workplace, effective communication skills, customer service, and fundamental academic skills. The curriculum also prepares students for pathways to other noncredit or credit certificate programs.

Required Courses

WRKP 2103 – Workplace Readiness: Career and Job Skills
WRKP 2101 – Workplace Readiness: Contextualized English Skills
or WRKP 2102 – Workplace Readiness: Contextualized Math Skills

Student Learning Outcomes:

1. Demonstrate effective listening and speaking skills, including the use of industry-specific vocabulary, for the CTE classroom and the industry workplace

2. Produce appropriate and accurate written communication required in the targeted CTE classroom and industry workplace
3. Demonstrate effective use of measurements and calculations applicable to industry or career requirements.
4. Implement strategic and successful job search and application techniques

DESCRIPTION OF COURSES

This section presents a description of Noncredit courses offered. Each description is self-contained, i.e., each contains important information of prerequisites, hours, limitations on enrollment, recommendations, scheduling by semesters and other data which may be required in making a decision to include the course in the student's program of study.

Prerequisites/Corequisites/Recommended Preparation

A **"prerequisite"** is a condition of enrollment, such as satisfactory completion of another course (defined as a grade of A, B, C, or pass), that must be met **BEFORE** a student can register for a course or an educational program in order to demonstrate readiness for that course or program. By meeting the prerequisite, the student shows that he or she has certain skills, concepts, and/or information without which the College considers success in the subsequent course or program highly unlikely.

A **"corequisite"** is a course in which a student is required to enroll **AT THE SAME TIME** that he or she is enrolled in another course. In the corequisite course, the student acquires certain skills, concepts, and/or information without which the College considers success in the concurrent course highly unlikely.

A **"recommended preparation"** statement in a course description means that a student is advised, but not required, to complete the identified course(s) prior to enrollment in another course or educational program. The skills, concepts, and/or information gained in the "recommended preparation" in another course or educational program will prepare students for success in the subsequent course or program.

All prerequisites, corequisites, and recommendation preparation statements listed in the course descriptions are periodically reviewed. Students – especially those new to Pasadena City College – should consult the Schedule of Classes and Counseling Services for the most current information.

Students are expected to meet valid and necessary course prerequisites and corequisites.

Adult Basic Education

ABE 3000 ADULT BASIC EDUCATION

Review and reinforcement of basic skills in reading (to 8th grade level), writing, math (through ratios and percents), grammar and spelling. Brush up on conversational English and pronunciation for those in need. General survival skills reviewed. Total of 108 hours lecture.

Grade Mode: P

ABE 3001 LANGUAGE ARTS

Basic skills preparation in the language arts for academic advancement to the adult high school diploma (AHSD) or General Educational Development (GED) programs. Upon completion and demonstration of competence in the course, students may advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 52 hours lecture.

Grade Mode: P, N

ABE 3002 MATHEMATICS

Review and reinforcement of arithmetic skills for academic advancement to the adult high school diploma (AHSD) or General Educational Development (GED) programs. Upon completion and demonstration of competence in the course, students may advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 52 hours lecture.

Grade Mode: P, N

Adult High School Diploma

AHSD 6400 PRACTICAL ENGLISH SKILLS

A review of grammar, spelling, reading, composition, and essay writing in preparation for taking the Adult High School Diploma Program exit exam or the General Education Development (GED) exam. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

Grade Mode: L

AHSD 6401 FUNDAMENTALS OF GRAMMAR A

Review of parts of speech, spelling, basic sentence structure, mechanics, and vocabulary skill building. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirement for English. Total of 72 hours lecture.

Grade Mode: L

AHSD 6402 FUNDAMENTALS OF GRAMMAR B

Comprehensive study of English usage, spelling, and mechanics. Improvement in basic writing skills with more

complex sentence structures and writing models. Increased vocabulary skill building. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirement for English. Total of 72 hours lecture.

Grade Mode: L

AHSD 6403 ESSENTIALS IN WRITING A

Sentence and paragraph composition. Vocabulary building and review of language mechanics and grammar. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirement for English. Total of 72 hours lecture.

Grade Mode: L

AHSD 6404 ESSENTIALS IN WRITING B

Review steps of the writing process, outlining, style exploration and introduction to research paper writing. Strengthen skills in grammar, vocabulary, and oral presentation skills. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirement for English. Total of 72 hours lecture.

Grade Mode: L

AHSD 6405 U.S. LITERATURE

A survey of the literature of the United States (fiction and non-fiction) from the colonial period to contemporary times focusing on social, cultural and literary contexts. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirement for English. Total of 72 hours lecture.

Grade Mode: L

AHSD 6406 BRITISH LITERATURE

A survey of British literature (fiction and non-fiction) focusing on cultural, literary, and social contexts. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirement for English. Total of 72 hours lecture.

Grade Mode: L

AHSD 6407 READING FUNDAMENTALS

An introduction to building vocabulary, reading comprehension, and critical thinking skills. A basic review of English language usage. Successful completion of this course will meet requirements for adult high school credit. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

Grade Mode: L

AHSD 6408 LITERATURE IN A MULTICULTURAL SOCIETY

Survey of multicultural literature (fiction and non-fiction)

focusing on social, cultural, and literary context. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirement for English. Total of 72 hours lecture.

Grade Mode: L

AHSD 6409 INTRODUCTION TO CREATIVE WRITING

Creative literary expression through poetry, drama, and short story. Individual creative writing in various forms. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirement for English. Total of 72 hours lecture.

Grade Mode: L

AHSD 6411 U.S. HISTORY: PRE-COLONIALISM TO THE CIVIL WAR

An analysis of social, economic, and political factors in United States history from the period of Pre-Colonialism to Reconstruction. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for United States history and the social sciences. Total of 72 hours lecture.

Grade Mode: L

AHSD 6412 U.S. HISTORY: RECONSTRUCTION TO PRESENT

An analysis of social, economic, and political factors in United States history from the period of Reconstruction to the present. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for United States history and the social sciences. Total of 72 hours lecture.

Grade Mode: L

AHSD 6413 INTRODUCTION TO AMERICAN GOVERNMENT

An introduction to American government and its relevance to understanding the democratic process. Study of the rights and responsibilities of the citizens of the United States on local, state, and federal levels. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for American government and the social sciences. Total of 72 hours lecture.

Grade Mode: L

AHSD 6414 INTRODUCTION TO ECONOMICS

An introduction to events that influence the American economy, including inflation, purchasing power, taxes, balance of payments, technology, deficit spending, and the cost of living. A review of foreign and domestic exchange, consumerism, GNP, and banking and currency. Successful completion of this course will meet the requirements for

five (5) Adult High School Diploma credits. Meets diploma requirements for economics and the social sciences. Total of 72 hours lecture.

Grade Mode: L

AHSD 6415 CONTEMPORARY AMERICAN SOCIAL ISSUES

Analysis and discussion of contemporary American social issues: market systems, consumerism, criminal justice system, class inequality, gender inequality, racial inequality, and militarism. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

Grade Mode: L

AHSD 6416 GLOBAL AFFAIRS

Survey of a wide range of global topics: 20th century world history, contemporary world history, customs, cultural hegemony, decision making, war and peace, global economy, and diplomacy. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for the social sciences. Total of 72 hours lecture.

Grade Mode: L

AHSD 6417 WORLD GEOGRAPHY

Study of people, places, and environments. A survey of the major cultural and physical regions of the world. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for world geography and the social sciences. Total of 72 hours lecture.

Grade Mode: L

AHSD 6421 MATH BASICS

Master basic arithmetic skills and operations with integers, fractions, decimals, and percentages; solve word problems. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

Grade Mode: L

AHSD 6422 PREALGEBRA

Prerequisite: AHSD 6421 or placement based on the math assessment process.

Introduction to the structure and concepts of Algebra, including variables, expressions, equations, absolute value, inequalities, and properties of real numbers; and the techniques of Algebra, including solving equations and inequalities, graphing linear equations, and solving word problems. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for mathematics. Total of 72 hours lecture.

Grade Mode: L

AHSD 6423 ALGEBRA 1A

Prerequisite: AHSD 6422 or placement based on the math assessment process.

Study of the language, concepts, and techniques of basic algebra, including signed numbers, expressions and equations, formulas, powers and roots, and inequalities. This course lays a foundation for upper level math and science courses. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for mathematics. Total of 72 hours lecture.

Grade Mode: L

AHSD 6424 ALGEBRA 1B

Prerequisite: AHSD 6423 or placement based on the math assessment process

Study of the language, concepts, and techniques of algebra, including exponents, systems of equations, quadratic and exponential functions, rational and irrational numbers, and polynomials. Lays a foundation for upper level math and science courses. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for mathematics. Total of 72 hours lecture.

Grade Mode: L

AHSD 6425 INTRODUCTION TO GEOMETRY

Prerequisite: AHSD 6424 or placement based on the math assessment process.

Overview of the elements of geometry and the properties of those elements. Use of properties in proofs to develop logical reasoning. Geometer's Sketchpad used to develop skills and understanding. Course integrates basic algebra into geometry and builds skills for upper level math. Successful completion of this course will meet the requirements for five (5) Adult High School Diploma credits. Meets diploma requirements for mathematics. Total of 72 hours lecture.

Grade Mode: L

AHSD 6426 LIFE SCIENCE – BIOLOGY

Introduction to the study of life, including biological chemistry, cells, organisms and classification, and ecology. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirements for biological science. Total of 72 hours lecture.

Grade Mode: L

AHSD 6427 LIFE SCIENCE – PHYSIOLOGY

Introduction to the study of physiology and genetics, with a focus on human systems. Structure and function of basic human organ systems are the focus, supplemented with contrasts to simple organisms, plant physiology, and

basic genetics. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirements for biological science. Total of 72 hours lecture.

Grade Mode: L

AHSD 6428 PHYSICAL SCIENCE – CHEMISTRY

Introduction to the study of chemistry, including atomic structure, substances, and reactions. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirements for physical science. Total of 72 hours lecture.

Grade Mode: L

AHSD 6429 PHYSICAL SCIENCE – PHYSICS

Introduction to the study of physics, including energy, optics, and forces. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Meets the diploma requirements for physical science. Total of 72 hours lecture.

Grade Mode: L

AHSD 6430 ENVIRONMENTAL SCIENCE – ECOLOGY

Introduction to the study of environmental science, including ecological systems of abiotic and biotic factors and current environmental challenges. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

Grade Mode: L

AHSD 6431 COMPUTER BASICS

Overview of computer hardware, software, operating systems, and file management; Internet and E-mail. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

Grade Mode: L

AHSD 6432 ART HISTORY

A survey of visual arts including painting, print making, sculpture, architecture and photography. Historical and contemporary art forms; perspective design, composition and color theory. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. This course meets requirements for the humanities. Total of 72 hours lecture.

Grade Mode: L

AHSD 6433 WORKPLACE SKILLS FOR THE 21ST CENTURY

Workplace preparation and skills for the 21st century. Decision-making and life-long learning skills. Build competency in written and oral communication and basic

math and computer skills. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

Grade Mode: L

AHSD 6434 PLANNING FOR ACADEMIC AND CAREER SUCCESS

Successful methods for improving academic and career strategies and skills. A survey of educational and occupational opportunities and requirements. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

Grade Mode: L

AHSD 6435 HEALTH

An informed use of health-related information and an overview of positive attitudes and responsible behaviors for making decisions to promote lifelong health. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

Grade Mode: L

AHSD 6436 MUSIC APPRECIATION

Introduction to classical and popular music. Development of music, explorations of composer's lives and historical and social contexts of the times. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. This course meets requirements for the humanities. Total of 72 hours lecture.

Grade Mode: L

AHSD 6437 GRAPHIC ART DESIGN

An introduction to the field of graphic design. Covers key design elements such as typography, creativity, visualization, composition, and web design. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

Grade Mode: L

AHSD 6438 COMPUTER APPLICATIONS

Use of applications software for database management, word processing, spreadsheet, and slideshow presentation. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. Total of 72 hours lecture.

Grade Mode: L

AHSD 6439 CONTEMPORARY SPANISH

An introduction to Spanish. Practice in Spanish language pronunciation, grammar and vocabulary in a contemporary

context. Exploration of culture in both contemporary and historical contexts. Successful completion of this course will meet requirements for five (5) Adult High School Diploma credits. This course meets requirements for the humanities. Total of 72 hours lecture.

Grade Mode: L

Building

BLDN 2300 INTRODUCTION TO OCCUPATIONAL SAFETY AND HEALTH FOR THE BUILDING TRADES

Basic construction safety on an apprenticeship level. Training for workers on the recognition, avoidance, abatement, and prevention of safety and health hazards in workplaces and provides information regarding workers' rights, employer responsibilities, and how to file a complaint. Total of 28 hours lecture.

Grade Mode: P, N

BLDN 2301 INTRODUCTION TO THE BUILDING TRADES AND CONSTRUCTION INDUSTRY

Introduction to the building trades and construction industry, different unions representing crafts, and the wide spectrum of careers. Course integrates academic and technical preparation with an emphasis on career awareness, exploration and skill preparation. Total of 48 hours lecture.

Grade Mode: P, N

BLDN 2302 BASIC CONSTRUCTION MATH FOR THE BUILDING TRADES AND CONSTRUCTION INDUSTRY

Introduction to basic mathematical skills required in a variety of construction trades. Emphasis on the basic arithmetic and geometry required to accurately perform routine tasks, estimate simple quantities, and read a standard metric ruler and scale. Total of 48 hours lecture.

Grade Mode: P, N

BLDN 2303 INTRODUCTION TO PLAN READING FOR THE BUILDING TRADES AND CONSTRUCTION INDUSTRY

Introduction to the various types of building plans used in the building trades and construction industry. Emphasis on interpreting different types of symbols, abbreviations, and keynotes found on construction drawings. Total of 48 hours lecture.

Grade Mode: P, N

BLDN 2304 BASIC MATERIAL HANDLING AND RIGGING

Preparation for practice in basic material handling and rigging in the building trades and construction industry. Total of 28 hours lecture.

Grade Mode: P, N

Business

BUSN 2400 ENTREPRENEUR BUSINESS START-UP BASICS FOR SUCCESS

Prepares students to be able to successfully start-up a small business and provides the skills for success as an entrepreneur. Provides the knowledge and skills to assess a business idea, create an individualized business plan, finance a business, open and market a business, and expand and manage business problems. Total of 32 hours lecture and 48 hours laboratory.

Grade Mode: P, N

BUSN 2601A COMPUTER KEYBOARDING A

Develop basic skills in keyboarding techniques using the touch method. Emphasis is on mastering keyboarding by touch to improve accuracy and speed to achieve a minimum of 30 net words per minute. Total of 9 hours lecture and 27 hours laboratory.

Grade Mode: P, N

BUSN 2601B COMPUTER KEYBOARDING B

Emphasis on the development of speed and accuracy, good keyboarding techniques, and correct formatting of business documents to produce documents that meet business standards. **For** students with prior keyboarding experience a speed of 30 to 45 net words per minute is recommended. Total of 9 hours lecture and 45 hours laboratory.

Grade Mode: P, N

BUSN 2611A COMPUTER KEYBOARDING A - BILINGUAL

General overview of keyboarding techniques using the touch method for bilingual students. Emphasis on keyboard mastery and preparation of basic documents. Total of 10 hours lecture and 26 hours laboratory.

Grade Mode: P, N

BUSN 2611B COMPUTER KEYBOARDING B – BILINGUAL

General overview of keyboarding techniques for bilingual students. Emphasis on the development of speed and accuracy, and correct formatting of business documents to produce documents that meet business standards. **For** students with prior keyboarding experience. Recommended

keyboarding speed of 25 words per minute. Total of 10 hours lecture and 44 hours laboratory.

Grade Mode: P, N

BUSN 2850 PERSONAL FINANCING AND BUSINESS START UP

This course provides the student with resources to identify capital to start a business or focus on a financial road map that can lead to positive business funding strategies. Total of 54 hours lecture.

Grade Mode: P, N

BUSN 2851 EFFECTIVE BUSINESS PLAN DEVELOPMENT

This course provides the organizational plan for developing a full business plan that can be utilized to identify business goals, growth, and opportunity. The course focuses on each component of a complete business plan that is acceptable to a venture capitalist, lending institution or business partner. Total of 54 hours lecture.

Grade Mode: P, N

BUSN 2852 BUSINESS OPPORTUNITY VENTURES

Understanding the nature of a business opportunity, how the government regulates them, and the steps for developing, investing, or buying a business opportunity. Students will understand how to become a licensor or seller of a business opportunity and how statutes vary from state to state. Total of 54 hours lecture.

Grade Mode: P, N

BUSN 4001 STARTING A SMALL BUSINESS

Introduction to small business terminology, operations, and procedures. Students will gain an understanding of the entrepreneurial business and start-up process. Application of the strength, weakness, opportunity, and threat (SWOT) analysis for startup entrepreneurs. Total of 18 hours lecture.

Grade Mode: P, N

BUSN 4002 MANAGING A SMALL BUSINESS

Introduction to managing a small business. Topics include marketing, legal aspects of handling a small business, leadership, and ethical business practices for small business ownership. Intended for students who plan to start a small business or who are small business owners. Total of 18 hours lecture.

Grade Mode: P, N

BUSN 4003 FINANCING A SMALL BUSINESS

Planning, researching, acquiring, and utilization of financing for a small business. Topics include start-up and recurring costs, financial statement analysis, forecasting, working capital management, and risk management. Total of 18 hours lecture.

Grade Mode: P, N

BUSN 4004 DEVELOPING A SMALL BUSINESS PLAN

Importance and purpose of a business plan. Research and analyze the essential information required to develop and present an effective business plan. Total of 18 hours lecture.

Grade Mode: P, N

BUSN 4401 HOW TO START YOUR OWN SMALL BUSINESS – BILINGUAL

Introduction to small business terminology, operations, and procedures. Students will gain an understanding of the entrepreneurial business and start-up process. Application of the strength, weakness, opportunity, and threat (SWOT) analysis for startup entrepreneurs. For the Spanish speaker. Total of 18 hours lecture.

Grade Mode: P, N

BUSN 4402 MANAGING A SMALL BUSINESS FOR THE SPANISH SPEAKER

Introduction to managing a small business for Spanish-speaking small-business entrepreneurs. Topics include marketing, legal aspects of handling a small business, leadership, and ethical business practices for small business ownership. Intended for students who plan to start a small business or who are small business owners. Total of 18 hours lecture.

Grade Mode: P, N

BUSN 4403 FINANCING A SMALL BUSINESS FOR THE SPANISH SPEAKER

Planning, researching, acquiring, and utilizing financing for a small business for Spanish speakers. Topics include start-up costs and recurring costs, financial statement analysis, forecasting, working capital management and risk management. Total 18 lecture hours.

Grade Mode: P, N

BUSN 4404 DEVELOPING A BUSINESS PLAN FOR THE SPANISH SPEAKER

Importance and purpose of a business plan. Research and analyze the essential information required to develop and present an effective business plan. For the Spanish speaker. Total of 18 hours lecture.

Grade Mode: P, N

BUSN 7301 MICROSOFT WINDOWS ESSENTIALS

Prepares students to work efficiently within the Microsoft Windows operating system. Topics include Windows desktop, creating, saving and finding files, file and folder management, accessing applications, internet basics and security, and customizing Microsoft Windows. Total of 36 hours lecture and 18 hours laboratory.

Grade Mode: P, N

BUSN 7302 MICROSOFT WORD ESSENTIALS FOR THE WORKPLACE

Basic hands-on instruction of word processing techniques and features using Microsoft Word to enhance and create a wide variety of documents, such as letters, memoranda, columnar tables, text tables, newsletters, mail merge labels and letters, and mailing documents. **Targeted** for students who have completed BUSN 7301, type 30 net wpm, or have work experience with the Windows Operating System. Total of 36 hours lecture and 18 hours laboratory.

Grade Mode: P, N

BUSN 7303 MICROSOFT EXCEL ESSENTIALS FOR THE WORKPLACE

Basic hands-on training of business applications using Microsoft Excel software. Features and functions of the software with emphasis on its use as a data organization, presentation and analysis tool. Includes topics on integrating Excel with other applications. **Targeted** for students who have completed BUSN 7301, type 30 net wpm, or have work experience with the Windows Operating System. Total of 36 hours lecture and 18 hours laboratory.

Grade Mode: P, N

BUSN 7304 FUNDAMENTALS OF OFFICE RECORDS MANAGEMENT AND FILING

Basic principles and procedures of record storage, control, retrieval and management by manual and electronic methods. Emphasis is also placed on guidelines regarding records storage, disposal, and management. Speed and accuracy in indexing, filing and finding documents in such systems as alphabetic, numeric, geographic, and subject. Total of 36 hours lecture.

Grade Mode: P, N

BUSN 7305 BASIC BUSINESS ENGLISH AND COMMUNICATIONS

Introduction to basic business memoranda, letters, e-mail messages, employment documents, and short reports. Creating messages that inform, persuade, and convey negative news is stressed. Emphasis is on the concepts of basic writing style such as organization, coherence, and unity as well as principles of grammar and punctuation of written business documents. Instruction in oral communication, speaking skills, and oral presentations. Communication technology, communication across cultures, listening skills, nonverbal communication, and workplace ethics are included. **Targeted** for students who have completed BUSN 7301, BUSN 7302 or have working experience with the Windows Operating System and/or Word. Total of 36 hours lecture and 18 hours laboratory.

Grade Mode: P, N

BUSN 7306 CAREER SKILLS FOR THE WORKPLACE

Techniques for effective time-management; goal setting; study skills; proper work habits, attitudes, ethics, teamwork, and standards for presenting a professional image at interviews and in the workplace. Total of 36 hours lecture and 18 hours laboratory.

Grade Mode: P, N

BUSN 7307 BASIC BUSINESS MATH

Basic math skills and its relevance to everyday applications and transactions. Solving mathematical problems, analyzing and interpreting data, and applying sound decision-making skills. Total of 36 hours lecture and 18 hours laboratory.

Grade Mode: P, N

BUSN 7308 BASIC BOOKKEEPING

Principles and practices of bookkeeping, including the fundamentals of double entry bookkeeping, journal entries, and preparation of basic financial statements. **Recommended** BUS 7303. Total of 45 hours lecture.

Grade Mode: P, N

BUSN 7310 COMPUTER MICROSOFT WINDOWS APPLICATIONS-BILINGUAL

Introduction to the Microsoft Windows operating system for bilingual students. Topics include Windows desktop, help, file and folder management, accessing applications and communicating, and customizing a computer using the control panel. Recommended keyboarding speed of 25 words per minute. Total of 36 hours lecture and 18 hours laboratory.

Grade Mode: P, N

BUSN 7402 MICROSOFT POWERPOINT ESSENTIALS

Basic hands-on training of business applications using Microsoft PowerPoint software. Features and functions of the software with emphasis on its use to develop, design, and deliver professional looking presentations. Includes concepts of combining text, graphics, animations and/or sound to create slides for electronic output. **Targeted** for students who have completed BUSN 7301, type 30 net wpm, or have work experience with the Windows Operating System. Total of 27 hours lecture and 9 hours laboratory.

Grade Mode: P, N

BUSN 7403 MICROSOFT ACCESS ESSENTIALS FOR THE WORKPLACE

Basic hands-on training of business applications using Microsoft Access software. Features and functions of the software with emphasis on its use as a data input, organization, and reporting tool. Includes topics on design concepts, use of database tools, and practice in creating

tables, queries, forms, and reports. **Targeted** for students who have completed BUSN 7301, type 30 net wpm, or have work experience with the Windows Operating System. Total of 36 hours lecture and 18 hours laboratory.

Grade Mode: P, N

BUSN 7404 MICROSOFT OUTLOOK ESSENTIALS FOR THE WORKPLACE

Basic hands-on training of business applications using Microsoft Outlook software. Features and functions of the software with emphasis on its use to manage and organize emails, calendars, meeting requests and contact information. **Targeted** for students who have completed BUSN 7301, type 30 net wpm, or have work experience with the Windows Operating System. Total of 27 hours lecture and 9 hours laboratory.

Grade Mode: P, N

BUSN 7501 MATH ESSENTIALS FOR THE WORKPLACE

Preparation for pre-employment math tests and/or reinforces practice in solving math problems related to bookkeeping, payroll and other business applications. Total 9 to 36 hours of lecture.

Grade Mode: P, N

BUSN 7508 QUICKBOOKS ESSENTIALS

Inputting customer and vendor information, creating invoices and purchase orders, writing checks, processing business transactions, and generating reports in QuickBooks. Reinforces learning the vocabulary used in bookkeeping and QuickBooks. Total hours 9 to 36 hours lecture.

Grade Mode: P, N

BUSN 7509 PAYROLL ESSENTIALS

Inputting customer and vendor information, creating invoices and purchase orders, writing checks, processing business transactions, and generating reports in QuickBooks. Reinforces learning the vocabulary used in bookkeeping and QuickBooks. Total hours 9 to 36 hours lecture.

Grade Mode: P, N

Child Development**CHDN 1100 INTRODUCTION TO TEACHING YOUNG CHILDREN**

Introduction to teaching in a professional early-childhood setting or program serving children under the age of six. Emphasis on writing a lesson plan and creating developmentally and culturally appropriate curriculum. Total of 24 hours of lecture.

Grade Mode: P, N

**CHDN 1101 INTRODUCTION TO HOME, SCHOOL
AND COMMUNITY RELATIONS**

Introduction to effective communication and best practices for child care providers for optimal home, school and community relations. Basic concepts of developing strong communication skills when working in a professional child care setting and critical techniques for communicating with diverse parents and co-workers. Total of 24 hours of lecture.

Grade Mode: P, N

**CHDN 1102 BASIC SKILLS FOR CHILD CARE
PROVIDER**

Introduction to basic theories of child growth and development, health and safety, and nutrition guidelines for infants, toddlers and preschool age children. Emphasis on CPR/First Aid training for child care providers. Total of 24 hours of lecture.

Grade Mode: P, N

**CHDN 4000 FAMILY HOME CHILD CARE PROVIDER:
INTRODUCTION TO CHILD
DEVELOPMENT**

Introduction to stages of child development, best practices in supporting healthy growth and development of children birth to six years of age, and family and community resources. Emphasis on ages and stages of development, and effective communication and guidance for working in a diverse family home care setting. Total of 24 hours lecture.

Grade Mode: P, N

**CHDN 4001 FAMILY HOME CHILD CARE PROVIDER:
CULTURALLY RELEVANT CURRICULUM**

Introduction to developmentally appropriate and culturally relevant curriculum. Emphasis on developing age appropriate activities and creating effective learning environments for children in a diverse family home day care setting. Total of 24 hours lecture.

Grade Mode: P, N

**CHDN 4002 FAMILY HOME CHILD CARE PROVIDER:
LICENSING AND WORKFORCE
READINESS**

Introduction to requirements for obtaining a license as a family home care provider. Review of the National Association for Education of Young Children (NAEYC) code of ethical conduct and California's licensing procedures. Emphasis on professionalism, health and safety, and licensing regulations. Total of 24 hours lecture.

Grade Mode: P, N

**CHDN 4100 FAMILY HOME CHILD CARE PROVIDER:
INTRODUCTION TO CHILD
DEVELOPMENT - BILINGUAL**

Introduction to stages of child development, best practices in supporting healthy growth and development of children birth to six years of age, and family and community resources for the bilingual student. Emphasis on ages and stages of development, and effective communication and guidance for working in a linguistically diverse family home care setting. Total of 24 hours lecture.

Grade Mode: P, N

**CHDN 4101 FAMILY HOME CHILD CARE PROVIDER:
CULTURALLY RELEVANT CURRICULUM-
BILINGUAL**

Introduction to developmentally appropriate and culturally relevant curriculum for the bilingual student. Emphasis on developing age appropriate activities and creating effective learning environments for children in a linguistically diverse family home day care setting. Total of 24 hours lecture.

Grade Mode: P, N

**CHDN 4102 FAMILY HOME CHILD CARE PROVIDER:
LICENSING AND WORKFORCE
READINESS-BILINGUAL**

Introduction to requirements for obtaining a license as a family home care provider for the bilingual student. Review of the National Association for Education of Young Children (NAEYC) code of ethical conduct and California's licensing procedures. Emphasis on professionalism, health and safety, and licensing regulations. Total of 24 hours lecture.

Grade Mode: P, N

Disabled Persons

**DSPS 2201 FINDING THE JOB THAT'S RIGHT FOR
YOU**

Fundamental course designed for adults with developmental disabilities who have an interest in finding realistic and meaningful employment. Emphasis on looking for different job opportunities that support the adult learner's interests, values, and skills. Recommended working knowledge of basic reading, writing, and math skills. Total of 16 hours lecture.

Grade Mode: P, N

DSPS 2202 GETTING THE JOB YOU WANT

Fundamental course designed for adults with developmental disabilities who have an interest in finding realistic and meaningful employment. Emphasis on filling out job applications, creating resumes and cover letters, and learning interviewing techniques. Recommended working knowledge of basic reading, writing, and math skills. Total of 16 hours lecture.

Grade Mode: P, N

DSPS 2203 BASIC SOCIAL SKILLS: GETTING ALONG WITH OTHERS IN THE WORKPLACE

Fundamental course designed for adults with developmental disabilities with an interest in maintaining realistic and meaningful employment. Emphasis on learning the skills needed to create good working habits, workplace diversity, communicate needs, and interact appropriately with co-workers and supervisors. Recommended working knowledge of basic reading, writing, and math skills. Total of 16 hours lecture.

Grade Mode: P, N

DSPS 2204 INTRODUCTION TO YOUR RIGHTS AND RESPONSIBILITIES IN THE WORKPLACE

Fundamental course designed for adults with developmental disabilities with an interest in maintaining realistic and meaningful employment. Focus on learning the skills needed to make good decisions and understand rights in the workplace. Recommended working knowledge of basic reading, writing, and math skills. Total of 16 hours lecture.

Grade Mode: P, N

DSPS 2205 WORKPLACE READINESS FOR STUDENTS WITH DISABILITIES

Introduction to skills and strategies needed for adults with disabilities to develop pathways to college, career technical training, or enter the workforce. Topics include the job application process, employee rights, interviewing skills, time management, importance of teamwork, diversity in the workplace, and basic workplace expectations. Total of 30 hours lecture.

Grade Mode: P, N

DSPS 3320 FUNCTIONAL LIVING FOR DEVELOPMENTALLY HANDICAPPED ADULTS

Functional living skills for adults residing in residential care facilities. Designed for adults with special needs as they relate to living at home, within a group home, and transferring to independent living. Emphasis on health and safety, personal hygiene and grooming, and social interaction and conversation skills. Total of 32 hours lecture.

Grade Mode: P, N

DSPS 3323 WORKPLACE SKILLS FOR DEVELOPMENTALLY DISABLED ADULTS

This course is primarily for developmentally disabled students employed, or wish to become employed, in a workshop environment. This course covers independent living and basic employment techniques including resume writing and interviewing. **Short term class.** Total of 32 hours lecture.

Grade Mode: P, N

DSPS 3370 MUSIC APPRECIATION AND PARTICIPATION/PHYSICALLY DISABLED ADULTS

Music appreciation and participation for physically disabled adults residing in a residential care facility. Emphasis on singing, rhythm, timing and listening. **Short term class.** Total of 24 hours lecture.

Grade Mode: P, N

DSPS 3374 ADAPTIVE ART FOR DISABLED ADULTS

Adaptive art techniques for disabled adults residing in a residential care facility. Emphasis on techniques to encourage the creative and artistic process for adults who experience physical and emotional challenges. **Short term class.** Total of 24 hours lecture.

Grade Mode: P, N

English as a Second Language

ESLN 1010 ENGLISH AS A SECOND LANGUAGE – LEVEL 1

Introduction to basic grammatical functions with an emphasis on the development of the language skills of listening with understanding and speaking to be understood. Listening, speaking, reading, and writing skills are integrated in basic life skills and basic work skills themes encountered in everyday context. Total of 216 hours lecture.

Grade Mode: P, N

ESLN 1010A ENGLISH AS A SECOND LANGUAGE – LEVEL 1 – CONDENSED

Introduction to basic grammatical functions with an emphasis on the development of language skills for listening with understanding and speaking to be understood. Listening, speaking, reading, and writing skills are integrated in basic life skills and basic work skills themes encountered in everyday context. Total of 72 hours lecture.

Grade Mode: P, N

ESLN 1015 ENGLISH AS A SECOND LANGUAGE – LEVEL 2

Further practice of basic grammatical functions by emphasizing accurate oral and written communication at the high-beginning level. Listening, speaking, reading, and writing skills are integrated for better understanding of English used in daily life and everyday work/job skills. Total of 216 hours lecture.

Grade Mode: P, N

**ESLN 1015A ENGLISH AS A SECOND LANGUAGE –
LEVEL 2 – CONDENSED**

Further practice of basic grammatical functions by emphasizing accurate oral and written communication at the high- beginning level. Listening, speaking, reading, and writing skills are integrated for better understanding of English used in daily life and everyday work/job skills. Total of 216 hours lecture.

Grade Mode: P, N

**ESLN 1020 ENGLISH AS A SECOND LANGUAGE –
LEVEL 3**

Emphasis on increased oral and written communication skills required to function independently in most situations beyond life and work-skills. Complex language functions and forms in listening, speaking, reading and writing are integrated with more general vocational and academic subjects. Total of 216 hours lecture.

Grade Mode: P, N

**ESLN 1020A ENGLISH AS A SECOND LANGUAGE –
LEVEL 3 – CONDENSED**

Introduction to high-intermediate level English language basic skills in reading and writing. Emphasis continues to be fluency in communication for extended conversation on a variety of subjects. Total of 72 hours lecture.

Grade Mode: P, N

**ESLN 1030 ENGLISH AS A SECOND LANGUAGE –
LEVEL 4**

Introduction to high-intermediate level English language basic skills in reading and writing. Emphasis continues to be fluency in communication for extended conversation on a variety of subjects. Total of 216 hours lecture.

Grade Mode: P, N

**ESLN 1030A ENGLISH AS A SECOND LANGUAGE –
LEVEL 4 – CONDENSED**

Introduction to high-intermediate level English language basic skills in reading and writing. Emphasis continues to be fluency in communication for extended conversation on a variety of subjects. Total of 72 hours lecture.

Grade Mode: P, N

**ESLN 1031 ENGLISH AS A SECOND LANGUAGE –
LEVEL 5**

Advanced English proficiency level in listening, speaking, reading, and writing to meet most life and work-related demands with little problem. Emphasis is on increased use of grammatical functions to prepare students for greater academic success at both high school and college levels. Total of 216 hours lecture.

**ESLN 1040 ENGLISH AS A SECOND LANGUAGE
CONVERSATION**

Oral communication skill development with emphasis on increased fluency in English conversation. Speaking and listening practice for daily future needs and academic goals is presented in a student-centered approach. Total of 54 hours lecture.

Grade Mode: P, N

**ESLN 1040A ENGLISH AS A SECOND LANGUAGE –
LEVEL 5 – CONDENSED**

Advanced English proficiency level in listening, speaking, reading, and writing to meet most life and work-related demands with little problem. Emphasis is on increased use of grammatical functions to prepare students for greater academic success at both high school and college levels. Total of 72 hours lecture.

Grade Mode: P, N

ESLN 1050 ESL AMERICAN CULTURE

Basic knowledge of American Culture required for non-native speakers. Emphasis is on cultural aspects that enable students to adjust to the American way of life. Total of 54 hours lecture.

Grade Mode: P, N

ESLN 1051 ESL BASIC WRITING SKILLS

Development of basic writing skills to the 8th grade level using computers and software. Emphasis is on basic proficiency in writing a directly developed cohesive paragraph and/or multiple paragraphs to increase success in future academic or other vocational goals. Total of 54 hours lecture and 36 hours laboratory.

Grade Mode: P, N

**ESLN 1052 ESL GRAMMAR AND VOCABULARY
DEVELOPMENT**

Basic grammar and vocabulary review. Emphasis is on basic grammatical forms and functions. Vocabulary development consists of identifying key words and phrases for increased expression, especially in speaking, writing and reading. Total of 54 hours lecture.

Grade Mode: P, N

**ESLN 1060A ENGLISH AS A SECOND LANGUAGE
LITERACY LEVEL A**

Development of beginning literacy in the basic components of the English language and basic grammatical functions. Emphasis on spelling and pronunciation and mastering the English alphabet and numbers. Total of 108 hours lecture.

Grade Mode: P, N

**ESLN 1060B ENGLISH AS A SECOND LANGUAGE
LITERACY LEVEL B**

Prerequisite: *ESL 1060A or placement based on the ESL assessment process.*

Functioning at beginning literacy by talking about language components using grammar terms and understanding grammar functions. Emphasis is on generating short and simple phrases and establishing basic listening, speaking, reading and writing skills. Total of 108 hours lecture.

Grade Mode: P, N

**ESLN 1061A ENGLISH AS A SECOND LANGUAGE,
LEVEL 1A**

Prerequisite: *ESL 1060B or placement based on the ESL assessment process.*

Development of high-literacy grammatical functions. Emphasis on recognizing conversation and passage patterns and expanding writing competency within the context of basic life and work skills. Total of 108 lecture hours.

Grade Mode: P, N

**ESLN 1061B ENGLISH AS A SECOND LANGUAGE,
LEVEL 1B**

Prerequisite: *ESL 1061A or placement based on the ESL assessment process.*

Functioning at high literacy by employing basic grammatical functions. Emphasis on writing and speaking in complete sentences and on reading and listening competencies within the context of basic life and work skills. Total of 108 lecture hours.

Grade Mode: P, N

**ESLN 1062A ENGLISH AS A SECOND LANGUAGE,
LEVEL 2A**

Prerequisite: *ESL 1010 or ESL 1061B or placement based on the ESL assessment process.*

Development of low-beginning grammatical functions. Emphasis on simple oral and written communication form and on gathering general ideas through listening and reading in daily life and work. Total of 108 lecture hours.

Grade Mode: P, N

**ESLN 1062B ENGLISH AS A SECOND LANGUAGE,
LEVEL 2B**

Prerequisite: *ESL 1062A or placement based on the ESL assessment process.*

Functioning at low-beginning proficiency by employing accurate grammatical forms. Emphasis on increasing listening, speaking, reading and writing organization and development skills in daily life and work. Total of 108 lecture hours.

Grade Mode: P, N

**ESLN 1063A ENGLISH AS A SECOND LANGUAGE,
LEVEL 3A**

Prerequisite: *ESL 1015 or ESL 1062B or placement based on the ESL assessment process.*

Development of high-beginning reading, writing, listening, speaking English communication skills using complex language functions and forms. Total of 108 hours lecture.

Grade Mode: P, N

**ESLN 1063B ENGLISH AS A SECOND LANGUAGE,
LEVEL 3B**

Prerequisite: *ESL 1063A or placement based on the ESL assessment process.*

Functioning independently at high-beginning proficiency in most situations. Emphasis on building listening, speaking, reading and writing skills within life, work and educational settings. Total of 108 hours lecture.

Grade Mode: P, N

**ESLN 1064A ENGLISH AS A SECOND LANGUAGE,
LEVEL 4A**

Prerequisite: *ESL 1020 or ESL 1063B or placement based on the ESL assessment process.*

Development of low-intermediate English language skills in reading and writing. Emphasis on extended oral fluency and editing of incorrect language form. Total of 108 hours lecture.

Grade Mode: P, N

**ESLN 1064B ENGLISH AS A SECOND LANGUAGE,
LEVEL 4B**

Prerequisite: *ESL 1064A or placement based on the ESL assessment process.*

Functioning with low-intermediate proficiency in many real-world situations requiring listening and reading, some involving technology. Emphasis on producing correct complex language forms in speaking and writing. Total of 108 hours lecture.

Grade Mode: P, N

**ESLN 1065A ENGLISH AS A SECOND LANGUAGE,
LEVEL 5A**

Prerequisite: *ESL 1030 or ESL 1064B or placement based on the ESL assessment process.*

Development of high-intermediate English proficiency in listening, speaking, reading, and writing to meet many life and work-related demands. Emphasis is on reducing miscommunication through the correct use of grammatical functions and content organization. Total of 108 hours lecture.

Grade Mode: P, N

**ESLN 1065B ENGLISH AS A SECOND LANGUAGE,
LEVEL 5B**

Prerequisite: *ESL 1065A or placement based on the ESL assessment process.*

Functioning at high-intermediate English proficiency in life-skills listening, reading, speaking and writing to transition into academic English environments. Emphasis is on increased use of grammatical functions and formal writing styles. Total of 108 hours lecture.

Grade Mode: P, N

ESLN 1072 INTERMEDIATE CONVERSATION

Increased ability and confidence to integrate into the English-speaking community through the development of intermediate level listening and speaking skills. Topics include small talk, telephone communication, asking for/giving directions, and discussing personal interests and plans. For students at a beginning high to intermediate-low level of ESL (noncredit Levels 2 and 3). Total of 54 hours lecture.

Grade Mode: P, N

ESLN 1074 ADVANCED CONVERSATION

Advanced instruction and training in effective American English listening and speaking skills. Topics include effective listening comprehension, communication strategies, interpersonal and intercultural competence, discussion of high-interest topics, and oral presentations. Designed for students at an intermediate to advanced level of ESL (noncredit levels 4, 5 and above). Total of 54 hours lecture.

Grade Mode: P, N

ESLN 1082 INTRODUCTION TO PRONUNCIATION

Introduction to effective pronunciation of American English. Topics include fundamental components of stress, rhythm, intonation, and connected speech, as well as recognizing and producing key individual speech sounds (vowels and consonants), within the context of beginning to intermediate vocabulary and grammar structures. Total of 54 hours lecture.

Grade Mode: P, N

ESLN 1084 ADVANCED PRONUNCIATION

Advanced instruction and training in effective pronunciation of American English. Topics include word stress, rhythm, intonation, thought groups, prominence and connected speech, as well as recognizing and producing complex features of vowels and consonants, within the context of advanced vocabulary and sentence structures. Designed for students at an intermediate to advanced level of ESL (noncredit levels 4, 5 and above). Total of 54 hours lecture.

Grade Mode: P, N

ESLN 1092 INTERMEDIATE GRAMMAR REVIEW

Designed to strengthen the existing grammar skills of beginning high to intermediate ESLN students (levels 2 and 3). Topics include basic English sentence structures and the appropriate use of verbs, nouns, adjectives and adverbs. Total of 54 hours lecture.

Grade Mode: P, N

ESLN 1094 ADVANCED GRAMMAR REVIEW

For intermediate to advanced ESLN students (levels 4, 5 and above) who seek to improve their grammar skills in American English in order to achieve more effective communication at work, school and in the community. Topics include the advanced use of verbs, adjectives, adverbs, and nouns, and the development of complex sentence structures. Total of 54 hours lecture.

Grade Mode: P, N

ESLN 1102 BASIC-INTERMEDIATE WRITING SKILLS

Focus on basic writing skills and computer literacy skills relevant to producing sentences and paragraphs in both formal and informal contexts. Targeted at beginning to intermediate ESLN students (Levels 2 and 3) who want to strengthen their basic writing skills. Total of 72 hours lecture.

Grade Mode: P, N

ESLN 1104 ADVANCED WRITING SKILLS

Focus on advanced writing skills and computer literacy skills relevant to producing effective paragraphs and essays. Targeted at intermediate to advanced ESLN students (Levels 4, 5 and above) who want to strengthen their writing skills in preparation for further academic work or employment. Total of 72 hours lecture.

Grade Mode: P, N

ESLN 1112 INTERMEDIATE READING & VOCABULARY

Designed to build vocabulary development and reading comprehension strategies of beginning to intermediate ESLN students (levels 2 and 3). Instruction focuses on reading strategies useful in academic, employment, and personal contexts. Heavy emphasis on learning basic vocabulary in context, and using various reading strategies to increase reading comprehension. Total of 54 hours lecture.

Grade Mode: P, N

ESLN 1114 ADVANCED READING & VOCABULARY

Designed to build vocabulary development and reading comprehension strategies of intermediate to advanced ESLN students (levels 4 and 5). Instruction focuses on reading strategies useful in academic, employment and personal contexts. Heavy emphasis on learning advanced

vocabulary in context, and using various reading strategies to increase reading comprehension. Total of 54 hours lecture.

Grade Mode: P, N

ESLN 1122A INTRODUCTION TO AMERICAN CULTURE, MODULE A

Provides beginning-high to intermediate (ESLN Level 2 and 3) students with an introduction to the fundamentals of U.S. culture while integrating English language skill development in reading, writing, listening, speaking, vocabulary and grammar. Focuses on intercultural communication, relationships in U.S. society (family, friends, neighbors, co-workers, community) and key American holidays and special events. Total of 54 hours lecture.

Grade Mode: P, N

ESLN 1122B INTRODUCTION TO AMERICAN CULTURE, MODULE B

Provides beginning-high to intermediate (ESLN Level 2 and 3) immigrant students with an introduction to the fundamentals of U.S. culture while integrating English language skill development in reading, writing, listening, speaking, vocabulary and grammar. Focuses on values and social norms, driving, food and dining out, money, shopping, government services, sports, music, entertainment, local culture and tourist attractions. Total of 54 hours lecture.

Grade Mode: P, N

ESLN 1124 ADVANCED AMERICAN CULTURE: CURRENT SOCIAL ISSUES

In-depth examination, analysis, discussion and debate of current issues and topics in American society, looking at the intersection of government, politics, and culture. Content will be integrated with intermediate to advanced instruction in English language skills (reading, writing, listening, speaking and vocabulary). Total of 54 hours lecture.

Grade Mode: P, N

ESLN 2050 ESL FAMILY LITERACY, MODULE A

Development of speaking, reading, and writing skills of limited English speaking parents with children in local elementary, middle and high schools. Family literacy emphasis covering reading with children, parental involvement, kinder readiness, school attendance, and assisting children of all ages with homework. Total of 36 hours lecture.

Grade Mode: P, N

ESLN 2051 ESL FAMILY LITERACY, MODULE B

Development of speaking, reading, and writing skills of limited English speaking parents with children in local elementary, middle and high schools. Family literacy emphasis on academic skills, school attendance, assisting children with homework, basic college readiness, and financial aid information. Total of 36 hours lecture.

Grade Mode: P, N

ESLN 2052 ESL FOR HEALTH SCIENCES

Introduction to the health care field for non-native speakers of English aimed at the development of language skills for careers in health care. Consists of communication skills and medical terminology. Total of 50 hours lecture.

Vocational English as a Second Language

ESLV 1012 VESL: GREEN CONSTRUCTION, MODULE A

Development of reading, speaking, listening and writing skills of beginning-high to advanced ESL students for careers in green construction. Emphasis on occupation-specific terminology and communication skills with common phrases for interacting with clients or future employers. Topics include basic tools and equipment, units of measurement, construction materials, and workplace readiness. Total of 54 hours lecture.

Grade Mode: P, N

ESLV 1013 VESL: GREEN CONSTRUCTION, MODULE B

Development of reading, speaking, listening, and writing skills of beginning-high to advanced ESL students for careers in green construction. Emphasis on occupation-specific terminology and communication skills with common phrases for interacting with clients or future employers. Topics include communicating with supervisors and coworkers, basic safety, protective clothing and gear, safety signs, and worker rights. Total of 54 hours lecture.

Grade Mode: P, N

ESLV 1014 VESL: GREEN HOUSEKEEPING, MODULE A

Development of vocabulary, listening, speaking, reading, and writing skills of beginning-low to intermediate-high ESL students interested in careers in green housekeeping. Emphasis on occupation-specific terminology and communication skills for interacting with employers in residential settings. Topics include "going green," household items, cleaning supplies and equipment, eco-friendly cleaning solutions, following directions, using checklists, and communicating about tasks, problems, repairs and work schedules. Total of 54 hours lecture.

Grade Mode: P, N

**ESLV 1015 VESL: GREEN HOUSEKEEPING,
MODULE B**

Development of vocabulary, listening, speaking, reading, and writing skills of beginning-low to intermediate-high ESL students interested in careers in green housekeeping. Emphasis on occupation-specific terminology and communication skills for interacting with employers in both residential and institutional settings. Topics include housekeeping tasks, laundry, job safety, workers' rights, marketing a business, job search, applications, resumes and interviews. Total of 54 hours lecture.

Grade Mode: P, N

**ESLV 2030 VESL: GREEN LANDSCAPING AND
GARDENING, MODULE A**

Development of vocabulary, listening, speaking, reading, and writing skills of beginning-high to advanced ESL students interested in careers in green gardening and landscaping. Emphasis on occupation-specific terminology and communication skills for interacting with clients or employers. Topics include landscape planning, plant identification, selection and care, soil, fertilizer, compost, mulch, turf removal and IPM (Integrated Pest Management). Total of 54 hours lecture

Grade Mode: P, N

**ESLV 2031 VESL: GREEN LANDSCAPING AND
GARDENING, MODULE B**

Development of vocabulary, listening, speaking, reading, and writing skills of beginning-high to advanced ESL students interested in careers in green gardening and landscaping. Emphasis on occupation-specific terminology and communication skills for interacting with clients or employers. Topics include landscape planning, irrigation systems, graywater and stormwater capture, tools, air quality, workplace safety, and employment opportunities. Total of 54 hours lecture.

Grade Mode: P, N

**ESLV 3000 VESL: CHILD CARE PROVIDER,
MODULE A**

Development of vocabulary, listening, speaking, reading, and writing skills of beginning-high to advanced ESL students interested in careers in child care, child development, or early childhood education. Emphasis on occupation-specific terminology and communication skills for interacting with children, families, and co-workers. Topics include basic child care vocabulary, effective communication in child care settings, health and safety in home and center-based programs, daily schedules, completing reports, and using children's books, games, and songs effectively. Total of 54 hours lecture.

Grade Mode: P, N

**ESLV 3001 VESL: CHILD CARE PROVIDER,
MODULE B**

Development of vocabulary, listening, speaking, reading, and writing skills of beginning-high to advanced ESL students interested in careers in child care, child development, or early childhood education. Emphasis on occupation-specific terminology and communication skills for interacting with children, families, and co-workers. Topics include developmental milestones for infants, toddlers and preschoolers, strategies for working with children at different stages of development, effective observations of child care programs, and career pathways. Total of 54 hours lecture

Grade Mode: P, N

ESLV 4000 VESL: HEALTH CARE, MODULE A

Development of vocabulary, listening, speaking, reading, and writing skills of intermediate to advanced ESL students interested in careers in health care. Emphasis on occupation-specific terminology and communication skills for interacting in a health care environment. Topics include basic medical terminology, basic anatomy, health problems and remedies, and health care occupations and career pathways. Total of 108 hours lecture.

Grade Mode: P, N

ESLV 4001 VESL: HEALTH CARE, MODULE B

Development of vocabulary, listening, speaking, reading, and writing skills of intermediate to advanced ESL students interested in careers in health care. Emphasis on occupation-specific terminology and communication skills for interacting in a health care environment. Topics include entry-level health care worker job duties such as the activities of daily living, standard precautions, vital signs, nutrition, safety, emergencies, and navigating health care facilities. Total of 108 hours lecture.

Grade Mode: P, N

**ESLV 5000 VESL WORK READINESS AND
COMMUNICATION SKILLS, MODULE A**

Language, communication and cultural skills for successful employment. Topics include workplace vocabulary, career planning, goal setting, self-assessment, job search, applications, resumes, and cover letters. Total of 72 hours lecture.

Grade Mode: P, N

**ESLV 5001 VESL WORK READINESS AND
COMMUNICATION SKILLS, MODULE B**

Language, communication and cultural skills for successful employment. Topics include workplace vocabulary, job interviews, employee benefits, employment forms, workplace culture and etiquette, workers' rights, oral and

written on-the-job communication skills, critical thinking, team building and problem solving. Total of 72 hours lecture.

Grade Mode: P, N

General Educational Development

GED 4001 LANGUAGE ARTS

Preparation in the language arts for students preparing for the General Educational Development (GED) exam. Provides instruction in reading comprehension, grammar, and writing the extended response essay, using successful test-taking strategies and hands-on online testing practice. Upon completion and demonstration of competence in the course, students may continue GED preparation or advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 36 hours lecture.

Grade Mode: P, N

GED 4002 MATHEMATICS

Preparation in mathematics for students preparing for the General Education Development (GED) exam in Mathematics. Provides instruction in quantitative and Algebraic problem solving. Skill building in test taking strategies to respond to questions on the GED exam in mathematical reasoning. Upon completion and demonstration of competence in the course, students may continue GED preparation or advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 36 hours lecture.

Grade Mode: P, N

GED 4003 SCIENCE

Preparation in science for students preparing for the General Education Development (GED) exam in science. Provides instruction in biology, physiology, chemistry, earth, and space science. Skill building in test taking strategies for multiple choice and short answer response questions on the GED exam. Upon completion and demonstration of competence in the course, students may continue GED preparation or advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 36 hours lecture.

Grade Mode: P, N

GED 4004 SOCIAL STUDIES

Preparation in social studies for students preparing for the General Education Development (GED) exam. Provides review in U.S. history, global history, economics, civics and government, and geography using successful test-taking strategies and hands-on online testing practice for mul-

iple choice and extended response questions. Upon completion and demonstration of competence in the course, students may continue GED preparation or advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 36 hours lecture.

Grade Mode: P, N

GED 4101 LANGUAGE ARTS - BILINGUAL

Preparation in the language arts for students preparing for the General Education Development (GED) Spanish exam. Provides instruction in reading comprehension, grammar, and writing the extended response essay, using successful test-taking strategies and hands-on online testing practice. Upon completion and demonstration of competence in the course, students may continue GED preparation or advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 36 hours lecture.

Grade Mode: P, N

GED 4102 MATHEMATICS - BILINGUAL

Preparation in mathematics for students preparing for the General Education Development (GED) Spanish exam in Mathematics. Provides instruction in quantitative and Algebraic problem solving. Skill building in test taking strategies to respond to questions on the GED exam in mathematical reasoning. Upon completion and demonstration of competence in the course, students may continue GED preparation or advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 36 hours lecture.

Grade Mode: P, N

GED 4103 SCIENCE - BILINGUAL

Preparation in science for students preparing for the General Education Development (GED) Spanish exam in science. Provides instruction in biology, physiology, chemistry, earth, and space science. Skill building in test taking strategies for multiple choice and short answer response questions on the Spanish GED exam. Upon completion and demonstration of competence in the course, students may continue GED preparation or advance to develop skills for the workplace and to prepare for future educational opportunities. Total of 36 hours lecture.

Grade Mode: P, N

GED 4104 SOCIAL STUDIES - BILINGUAL

Preparation in social studies for students preparing for the General Education Development (GED) Spanish exam. Provides review in U.S. history, global history, economics, civics and government, and geography using successful test-taking strategies and hands-on online testing practice for multiple choice and extended response questions. Upon completion and demonstration of competence in the

course, students may continue GED preparation or advance to develop skills for the workplace; and to prepare for future educational opportunities. Total of 36 hours lecture.
Grade Mode: P, N

Graphic Design

GRFN 3001 BASIC GRAPHIC DESIGN

Introduction to the basic principles of graphic design and design production. Emphasis placed on basic layouts, fundamentals of typography, and scanning software for the pre-press production environment. Total of 36 hours lecture and 14 hours of laboratory.

Grade Mode: P, N

GRFN 3002 FUNDAMENTALS OF GRAPHICS AND PRODUCTION

Designing graphics, introduction to document creation for print, effective use of graphics and type in web design. Emphasis in exploring strategies for developing personal design portfolios, and careers in graphic design. Total of 36 hours lecture and 14 hours laboratory.

Grade Mode: P, N

Immigration

IMME 1000 CITIZENSHIP

Preparation of non-citizens for naturalization. **Short term class.** Total of 32 hours lecture.

Grade Mode: P, N

IMME 3000 CITIZENSHIP PREPARATION

Preparation for United States citizenship by navigating through the Naturalization process including preparation for taking the four tests for citizenship, the Oath of Allegiance, and by having the language skills and knowledge to live as productive citizens. Total of 40 hours of lecture.

Grade Mode: P, N

IMME 3001 DEVELOPMENT OF LITERACY SKILLS FOR NATIVE SPANISH SPEAKERS

Development of Spanish literacy skills for native speakers. Includes reading, writing, and survival skills necessary for success in workplace, academic and social settings. Designed for native Spanish speakers. Total of 50 hours lecture and 10 hours laboratory.

Grade Mode: P, N

IMME 3002 ENGLISH FOR WRITTEN DRIVER'S TEST

Preparation for the written driving test in English while acquiring the essential vocabulary needed to understand the questions and answers. Procedures for taking the test at the Department of Motor Vehicles (DMV) as well as the rules when driving in California. Total of 25 hours lecture.

Grade Mode: P, N

Learning Assistance Center

LAC 3031 SUPERVISED TUTORING

Individualized or small group tutoring for students needing additional knowledge and study skills to succeed in regular course work.

Grade Mode: P, N

LAC 3033 LEARNING ASSISTANCE

Skills development for individual students through the use of technology in supervised learning centers. Designed to supplement classroom instruction through activities suggested by faculty to improve learning. Total of 450 hours lecture.

Grade Mode: P, N

Medical Office

MAN 1001 INTRODUCTION: MEDICAL INTERPRETATION & TRANSLATION, MODULE A

Introduction to basic skills for translation and interpretation during medical visits and procedures. Topics include medical terminology, discussions of cultural sensitivity and ethics related to the medical interpreter and translator, college academic programs, and job opportunities in interpretation and translation in a medical setting. Total of 20 hours lecture and 40 hours laboratory.

Grade Mode: P, N

MAN 1002 INTRODUCTION: MEDICAL INTERPRETATION & TRANSLATION, MODULE B

Introduction to techniques for written translation, simultaneous, consecutive, summary interpreting and sight translation for assisting patients, nurses, doctors, and administrators in a medical setting. Topics include translation techniques, and requirements for state and federal medical interpretation certification. Total of 20 hours lecture and 40 hours laboratory.

Grade Mode: P, N

**MAN 5000 MEDICAL FRONT OFFICE CLERK:
OFFICE PROCEDURES**

Introduction to medical office procedures in preparation for entry-level positions in a medical front office setting. Includes medical terminology, medical transcription, medical billing and coding, patient confidentiality, and workforce preparation skills. Keyboarding experience advised. Total of 80 hours lecture and 10 hours laboratory.
Grade Mode: P, N

**MAN 5001 SOFTWARE APPLICATIONS FOR MEDICAL
FRONT OFFICE SETTINGS**

Introduction to software applications for individuals entering the medical front office setting. Provides a basic introduction to spreadsheets, accounts receivable, insurance entry, patient demographic entry, and scheduling systems as they apply to the medical front office. Keyboarding experience advised. Total of 36 hours lecture and 108 hours laboratory.
Grade Mode: P, N

Older Adults

**OLAD 2900 SEWING TECHNIQUES FOR
OLDER ADULTS**

Designed for older adult students with all levels of sewing abilities. Emphasis on the development and use of good sewing techniques to build confidence for task completion, craft-related problem-solving skills, including appropriate application of some speed-sewing techniques, the use of commercial patterns, proper fit, and independent creation of patterns for personal projects to support social/personal. Total of 54 hours lecture.
Grade Mode: P, N

**OLAD 2901 CREATIVE STITCHERY FOR
OLDER ADULTS**

Designed to cover a wide range of hand embroidery and stitchery techniques for seniors which include making wall hangings, pictures, pillows, and other decorative items. To enhance stitchery as an art form, various threads and materials will also be used in the finished item. **Short term class.** Total of 32 hours lecture.
Grade Mode: P, N

OLAD 3120 LIFE REVIEW

Emphasizes life review through the modalities of the oral tradition of storytelling and written journal memoir. Techniques for creative writing and verbal story-craft are used as activities for preservation of personal and family history that supports self-actualization in older adults

through memory/cognitive stimulation, creativity, and social activities. Total of 27 hours lecture.

Grade Mode: P, N

**OLAD 3371 MUSIC APPRECIATION AND
PARTICIPATION FOR OLDER ADULTS**

Music appreciation for older adults. Emphasis on the development of active listening skills and the enjoyment of music in relation to art, culture, history, and popular music. Music activities with the older adult population provide cognitive, social, and physical benefits as a result of stimulation of brain pathways using music and exercise of memory associated with the auditory cortex. Total 36 hours lecture.

Grade Mode: P, N

**OLAD 3379 HISTORY OF EUROPEAN ART FOR
OLDER ADULTS**

A comprehensive survey of Europe's cultural achievements from Charlemagne and the Middle Ages, to World War II. This visually stimulating course meets a need for adventure while providing numerous opportunities to expand memory retention. **Short term class.** Total of 24 hours lecture.

Grade Mode: P, N

OLAD 3380 TAI-CHI CHU'AN FOR OLDER ADULTS

This course introduces older adults to a Chinese health exercise which is neither vigorous nor strenuous. It is suitable for older adults who want to exercise to gain or maintain good health. It will strengthen the muscles and organs, relax the mind and body, improve blood circulation, and increase memory and concentration. **Short term class.** Total of 24 hours lecture.

Grade Mode: P, N

Parenting

**PAR 7603 PARENT EDUCATION DISCUSSION
GROUPS – PRESCHOOL AGE**

Human growth and development with primary emphasis on the preschool age child. Parent roles and self-understanding; parental values and goals; family communication; analysis of varying philosophies of child rearing; health and nutrition; societal influences on the home. Total of 64 hours lecture.

Grade Mode: P, N

**PAR 7608 PARENT EDUCATION DISCUSSION
GROUPS – CHILD, FAMILY, SCHOOL**

Designed for parents who have a limited background in English. Parents learn and recognize basic daily English so that they can transmit improved literacy skills to their children and family. Provides an environment for adults

with small children that promotes effective communication, child rearing, and family development in a contemporary American culture. Encourages a participatory role in the school and the community. Total of 32 hours lecture.

Grade Mode: P, N

PAR 7617A YOUR GROWING 2-YEAR-OLD

Parents learn about the reality of, and the reasons for the behavior of the two-year old - known as the first adolescence. The unique needs of that child and that child's caring adults, and ways to meet these needs will be discussed. An emphasis will be on communication and listening skills, as well as the uniqueness of each child, adult, and family. The child accompanying the enrolled adult student must be two years old by September 1 of the current school year. Total of 32 hours lecture and 16 hours laboratory.

Grade More: P,N

PAR 7617B YOUR GROWING 3-YEAR-OLD

Parents and their three-year old children attend classes together in a supportive, stimulating, age appropriate environment. Designed to emphasize effective communication and parenting skills that encourage positive family interaction. The child accompanying the adult student must be three years old as of September 1 of the current school year. Total of 32 hours lecture and 16 hours laboratory.

Grade More: P,N

PAR 7617C GETTING YOUR 4-YEAR-OLD READY FOR KINDERGARTEN

Parents and their four-year old children attend classes together in a supportive, stimulating, age appropriate environment. The stages of child development of the four-year old, aspects of child self-esteem and effective parenting skills are explored. Designed to emphasize the parental role in the school process and deciding if the child is kindergarten ready. The child accompanying the enrolled adult must be four years old as of December 2 of the current school year. Total of 32 hours lecture and 16 hours laboratory.

Grade More: P,N

PAR 7618A STAGES OF DEVELOPMENT: 2 YEARS OLD

Parents and their two-year old children attend classes together in a supportive, stimulating, age appropriate environment. Students will engage in course material that covers child development theory, recognize milestones, create healthy family habits, and support child's optimal growth and development. The child accompanying the

adult student must be **two years old as of September 1st of the current school year**. Total of 32 hours lecture and 16 hours laboratory.

Grade Mode: P, N

PAR 7618B YOUR GROWING FAMILY: 0-5 YEARS OLD

Parents and their children attend classes together in a supportive, stimulating, age appropriate environment to learn effective discipline, sibling relationship strategies, and optimal family dynamics. Total of 32 hours lecture and 16 hours laboratory.

Grade Mode: P, N

PAR 7680A INFANT PARENTING: 0-6 MONTHS

Parents with infant children participate in weekly class meetings to learn principles of child development, communication, and problem solving, creating positive parent-child interaction. The child accompanying the enrolled adult student must be **birth-6 months by September 1 of the current school year**. Total of 48 hours lecture.

Grade Mode: P, N

PAR 7680B PARENTING IN THE FIRST YEAR: 0-12 MONTHS OLD

Parents with infant children participate in weekly class meetings to learn principles of child development, communication, and problem-solving, creating positive parent-child interaction. The child accompanying the enrolled adult student must be **birth-12 months after September 1 of the current school year**. Total of 48 hours lecture.

Grade Mode: P, N

PAR 7680C INFANT PARENTING: 7-12 MONTHS

Parents observe, record, and discuss the development of the 7- through 12-month-old child to learn principles of child development, communication, and problem solving, creating positive parent-child interaction. The child actively explores every aspect of his/her world. The child accompanying the enrolled adult student must be **7 through 12 months by September 1 of the current school year**. Total of 48 hours lecture.

Grade Mode: P, N

PAR 7681A PARENTING YOUR TODDLER: 13-17 MONTHS

Parents with children ages 13 through 17 months participate in weekly class meetings to learn principles of child development, discipline philosophies, communication and strengthening family relationships. Particular emphasis will be given to learning to understand the child's emerging motor skills, language acquisition and drive to independence. The child accompanying the enrolled adult

student must be **13 through 17 months by September 1 of the current school year**. Total of 32 hours lecture and 16 hours laboratory.
Grade Mode: P, N

**PAR 7681B PARENTING YOUR TODDLER:
18-23 MONTHS**

Parents observe, record, and discuss the development of the 18- through 23-month-old child to understand their child's needs and develop stronger and more positive parental skills to help the child build self-esteem and confidence. Parents will discover with the child in an age-appropriate environment the many ways of learning through music, creative activities, play, and social interaction. Parents will share ideas, resources, and information. The child accompanying the enrolled adult student must be **18 through 23 months by September 1 of the current school year**. Total of 32 hours lecture and 16 hours laboratory.
Grade Mode: P, N

**PAR 7682 PARENTING YOUR PRESCHOOL AGE
CHILD: 2-4 YEARS OLD**

Parents and their pre-school children, **ages two to pre-kindergarten**, attend weekly classes together in a supportive, stimulating, anti-bias environment. Discussion on child growth and development, communication, and problem solving to create positive family interaction. Children accompanying the enrolled adult student must be **2 years to 4 years as of September 1 of the current school year**. Total of 32 hours lecture and 16 hours laboratory.
Grade Mode: P, N

PAR 7683 MULTI-AGE PARENTING: 0-5 YEARS OLD

Parents with pre-school age children participate in weekly class meetings to learn principles of child development, communication, problem-solving, and family interaction. The child accompanying the enrolled adult student must be **birth to 4 years old by December 2 of current school year**. Total of 32 hours lecture and 16 hours of laboratory.
Grade Mode: P, N

**PAR 7684 PARENT EDUCATION DISCUSSION
GROUPS – COURT MANDATED**

Designed for parents who have been assigned by the courts to attend a parent education discussion group. Emphasis on family dynamics, developmental stages of children, communication and discipline, developing self-esteem in children, and stress management for parents. Community resources of support and guidance. Meets court requirement. **Short term class**. Total of 32 hours lecture.
Grade Mode: P, N

PAR 7685 PARENT EDUCATION DAD'S CLASS

Fathers or other male caregivers participate in weekly class meetings with children to learn principles of child development, discipline philosophies, communication and strengthening family relationships. Particular emphasis will be placed on the unique skills men bring to parenting as gender differences, societal expectations and family histories are addressed. Child accompanying the enrolled adult must be **18 months to 4 years old by September 1 of the current school year**. **Short term class**. Total of 32 hours lecture.
Grade Mode: P, N

**PAR 7686 SYSTEMATIC TRAINING FOR EFFECTIVE
PARENTING OF PRESCHOOLERS**

Designed for parents of pre-school age children, birth to 5 years old. Parents learn to understand children and gain skills for effective parenting. Emphasis on parent interaction with materials and each other to learn sound child-rearing principles. **Short term class**. Total of 16 hours lecture.
Grade Mode: P, N

**PAR 7687 SYSTEMATIC TRAINING/EFFECTIVE
PARENTING OF SCHOOL AGE CHILDREN**

Designed for parents of pre-school age children, birth to 5 years old. Parents learn to understand children and gain skills for effective parenting. Emphasis on parent interaction with materials and each other to learn sound child-rearing principles. **Short term class**. Total of 16 hours lecture.
Grade Mode: P, N

**PAR 7688 SYSTEMATIC TRAINING FOR EFFECTIVE
PARENTING OF TEENS**

Designed to provide systematic training for improving parent-teen relationships. Parent learns to understand teenagers and gain skills for effective parenting. The parenting program helps parents find realistic, effective, and enjoyable ways to relate to the emerging young adults in their family. Total of 16 hours lecture.
Grade Mode: P, N

Personal Care Attendant

**PCAN 3000 PERSONAL CARE ATTENDANT I:
BASIC CARE**

Introduction to entry-level Personal Care Attendant skills, including non-medically directed personal care and home management activities. Emphasis on understanding and working with older patients, care giver ethics and skills, home safety, physical movement, communication, nutrition, medical guidelines, elder and dependent adult abuse, and workforce preparation. Total of 70 hours lecture.
Grade Mode: P, N

**PCAN 3001 PERSONAL CARE ATTENDANT II:
DEMENTIA AND END OF LIFE CARE**

Introduction to care giving needs for patients with dementia, including Alzheimer's disease, associated with end of life care. Emphasis on types of causes of dementia, principles of end-of-life-care, advance planning, emotional issues related to death and dying, cultural diversity, and community resources to support families and caregivers. Total of 36 hours lecture.

Grade Mode: P, N

Paralegal Translation

**PLGN 1001 INTRODUCTION: LEGAL
INTERPRETATION & TRANSLATION,
MODULE A**

Introduction to basic skills for interpretation and translation in the legal field. Topics include legal terminology, discussions of cultural sensitivity and ethics related to the legal interpreter and translator, college academic programs, and job opportunities in interpretation and translation in a legal setting. Total of 20 hours lecture and 40 hours laboratory.

Grade Mode: P, N

**PLGN 1002 INTRODUCTION: LEGAL
INTERPRETATION & TRANSLATION,
MODULE B**

Introduction to techniques for written translations, simultaneous, consecutive, summary interpreting, and sight translation for assisting judges, attorneys, law enforcement, and individuals in court proceedings. Topics include translation techniques, and requirements for state and federal judicial interpretation certification. Total of 20 hours lecture and 40 hours laboratory.

Grade Mode: P, N

Workplace Readiness

**WRKP 2101 WORKPLACE READINESS:
CONTEXTUALIZED ENGLISH SKILLS**

Focus on developing the English language skills required in a target industry, Career and Technical Education training program, pre-apprenticeship, or apprenticeship program. Topics include industry-specific vocabulary, reading, writing, listening, speaking and study skills. Total of 18 to 72 hours of lecture.

Grade Mode: P, N

**WRKP 2102 WORKPLACE READINESS:
CONTEXTUALIZED MATH SKILLS**

Focus on developing the practical math skills required for students in a target industry, Career and Technical Educa-

tion training program, pre-apprenticeship, or apprenticeship program to perform calculations and measurements. Total 18 to 72 hours of lecture.

Grade Mode: P, N

**WRKP 2103 WORKPLACE READINESS:
CAREER AND JOB SKILLS**

Focus on preparing students to apply for or maintain a job in a career or technical field or enter a Career and Technical Education training program, pre-apprenticeship, or apprenticeship program. Total of 18 to 45 hours of lecture.

Grade Mode: P, N

ADDITIONAL SERVICES

Student Success Center

The Student Success Center (SSC) at CEC offers students individualized support across the curriculum for noncredit instruction. Tutoring, supplemental materials, and independent skill improvement are provided for students, particularly in ESL, Adult Basic Education (ABE), Adult High School Diploma Program (AHSD), GED, and Career-Technical Education programs. Students can utilize tutoring, computerized educational programs, videos, audiocassettes, books, and other multimedia educational resources.

Disabled Student Programs and Services (DSPS)

DSPS provides assistance and guidance for students with hearing, learning, physical, speech, or visual disabilities.

The Learning Assistance Center (LAC) at CEC offers students individualized support across the curriculum for noncredit instruction. Tutoring, supplemental materials, and independent skill improvement are provided for students, particularly in ESL, Adult Basic Education (ABE), Adult High School Diploma Program (AHSD), GED, and Career-Technical Education programs. Students can utilize tutoring, computerized educational programs, videos, audiocassettes, books, and other multimedia educational resources.

Parking

Students may purchase semester or intersession parking permits for parking at the Community Education Center (CEC) or at Student Business Services on the main PCC campus. A free shuttle service to and from the Colorado Campus is available.

NOTE: CEC Parking Permits are NOT valid for parking on other PCC campuses.

Student Identification Cards

All students are to obtain the LancerCard ID, student identification card. There is no fee for a student's first LancerCard ID. It provides services to: book buy-back and purchasing with checks at the PCC Bookstore, use of computer centers and labs, the Associated Students Computer Café, the Learning Assistance Center, math and music labs, physical fitness facilities, PCC's Shatford Library, and transactions at Student Business Services, Financial Aid, Fiscal Services. Student ID cards are available at the Community Education Center.

Additional Services at PCC Colorado Campus

Noncredit students are encouraged to utilize available services to them at the Colorado Campus. A free shuttle service is available for students who wish to travel between the Community Education Center, the Allen Avenue Goldline Station, and the PCC Colorado Campus. The shuttle service operates between the hours of 6:30 a.m. and 10:45 p.m. and departs every 15-30 minutes from each location.

The Colorado Campus shuttle stop is located on the north east of the campus between Lots 6 and 7. The Community Education Center has two shuttle stop locations; one is in Lot C at the north end and one is in Lot D in the center. The shuttle can be met curbside at the Allen Avenue Goldline Station.

Students may want to use Colorado Campus services such as Shatford Library (open Monday-Saturday), Campus Bookstore (open Monday-Friday), Child Development Center (open Monday-Friday), and the CalWORKs Office (California Work Opportunities and Responsibility to Kids program).

PASADENA CITY COLLEGE
CATALOG
2019-2020

Pasadena City College Faculty



SECTION IX

PASADENA CITY COLLEGE FACULTY

ABDELKERIM, RICHARD J., Assistant Professor, Division of Mathematics and Computer Science. B.S., UCLA; M.S., CSU Northridge; M.A., Loyola Marymount University, Los Angeles; Ph.D., University of Illinois, Chicago.

ABEDZADEH, SAEED, Assistant Professor, Division of Engineering and Technology. B.S., Howard University, Washington, DC; M.S., University of Memphis, Memphis, TN.

ACKER, LAUREN B, Instructor, Division of Social Sciences. B.A., Cornell University; M.A., UCLA; Ph.D., UCLA.

ADLER, BRIAN, Instructor, Division of English. B.A., University of Washington, Seattle, WA; M.A., UC Irvine.

AGREDANO, HECTOR, Instructor, Division of Natural Sciences. B.A., UC Santa Cruz; Ph.D., CUNY.

AGUIRRE, MARYLYNN G., Professor, Division of Health Sciences. B.S.N., Brigham Young University; M.N., Ph.D., UCLA.

ALDAS, SARA, Assistant Professor and Counselor, Counseling and Career Services. A.A., Mt. San Antonio College; B.A., M.S., CSU Fullerton.

ALEXANDER, TAMEKA, Counselor (Outreach), Counseling and Career Services. B.S., California State Polytechnic University Pomona, Pomona; M.S., University of LaVerne, LaVerne, CA.

ALTOUNJI, MYRIAM, Counselor, Counseling and Career Services. B.S., UCLA; MS, California Lutheran University; Ed.D., California Lutheran University.

ALVARADO, THEA S., Instructor, Division of Social Sciences. B.A., UC Berkeley; M.A., UC Irvine; Ed.D., UC Davis.

AMOUZEGAR, ALI, Assistant Professor, Division of Engineering and Technology. M.S., University of Tehran, Iran.

ANDERSON, MELISSA, Instructor, Division of Natural Sciences. B. S., Brigham Young University, Utah; Ph.D., University of Wisconsin.

ANDERSON, SUZANNE J., Assistant Professor, Division of Social Sciences. B.A., University of Oregon, Eugene; M.A., Claremont Graduate School; M.A., Ph.D., USC.

ANDREASYAN, GRAYR, Instructor, Division of Mathematics and Computer Science. B.S., Yerevan State University, Armenia; M.S., Ph.D., Moscow State University, Russia.

ANSARI, ALIREZA, Assistant Professor, Division of Natural Sciences. B.S., UCLA; M.S., CSU Long Beach.

APIAFI, GRACE, Instructor, Division of Kinesiology, Health and Athletics. B.S.C., M.S.C., University of Wyoming.

ARAGON, JAMES, Associate Professor, Counselor, Counseling and Career Services. B.S., CSU Fullerton; M.S., San Francisco State University.

ARANA, INGRID S., Counselor, Counseling and Career Services. A.A., Los Angeles Community College; B.A., UC Santa Barbara; M.S., USC.

ARCHIBALD, JEFFREY D., Dean, Division of Social Sciences. B.A., Cornell University; M.S., Illinois State University.

ARELLANO, OFELIA, Dean of Academic Affairs. A.A., Imperial Valley College, CA; B.A., M.A., Ph.D., UC Santa Barbara.

ARENSON, LAUREN, Professor, Division of Social Sciences. B.A., UC Santa Barbara; M.A., CSU Los Angeles; Ph.D., USC.

ARNTSON, JAY, Instructor, Division of Performing and Communication Arts. B.A., UC Berkeley; M.A., CSU Long Beach.

ASHCROFT, JARED M., Instructor, Division of Natural Sciences. B.S., CSU Long Beach; M.A., Ph.D., Rice University, Houston, TX.

ASHRAF, JAMAL, Assistant Professor, Division of Business. B.S., CSU Dominguez Hills; M.S., CSU Long Beach.

AXIBAL-CORDERO, ALLAN, Instructor, Division of Performing and Communication Arts. A.A., Mt. San Antonio College; B.A., UCLA; M.A., CSU Los Angeles.

BADEN, STANLEY, Assistant Professor, Visual Arts and Media Studies. B.F.A., Columbia College; M.F.A., Otis Art Institute.

BAJAH, JEFF TARKER, Instructor, Division of Business. B.S., Obafemi Awolowo University, Nigeria; M.S. (in progress, California Lutheran University); M.B.A., Kaplan University; Ed.D., California Lutheran University.

BAKER, CLAIRE ANNA, Instructor, Division of Visual Arts and Media Studies. B.A., Brown University; M.F.A., UCLA.

BALDO, MARIELLA, Instructor, Noncredit Division, B.S., CSU Long Beach; M.A., National University

BANKS, MICHELLE, Professor, Division of English. B.A., UC Irvine; M.A., CSU Los Angeles.

BANKS-SMITH, CHERYL, Associate Professor, Division of Performing and Communication Arts. B.A., UC Berkeley; M.F.A., Ohio State University.

BARKER, SARAH, Assistant Professor, Division of Performing and Communication Arts. B.A., James Madison University, Harrisburg VA; M.F.A., Chapman University, Orange, CA.

BARKESHLI, SASSAN, Assistant Professor, Division of Business. B.S., University of Kansas; M.S., Azusa Pacific University.

BARRON, SERGIO, Instructor, Division of Business. B.S., M.A., Pepperdine University.

BASTANI, SHAROKH, Professor, Division of Social Sciences. B.A., M.A., Bombay University; Ph.D., Rice University.

BEARD, CHERYL, Assistant Professor, Division of Social Sciences. B.A., UC Irvine; M.A., Ph.D., Claremont Graduate School.

BELL, ROBERT H., Senior Vice President/Assistant Superintendent, Noncredit and Offsite Campuses. B.A., M.A., University of Redlands; Ed.D., University of the Pacific.

BERG, THOMAS M., Assistant Professor, Division of Health Sciences. A.A., Los Angeles City College; B.S.N., M.S.N., CSU Los Angeles.

BERMUDEZ, FRANK J., Instructor, Division of Mathematics and Computer Science. B.S., California State Polytechnic University, Pomona; M.S., California State Polytechnic University, Pomona.

BEYER, RICHARD, Counseling Psychologist and Professor, Psychological Services. B.A., University of Redlands; Ph.D., United States International University.

BHADHA, BAKHTAWAR, Associate Professor, Division of Social Sciences. Teacher's Diploma, Trinity College of Music, England; B.A., Bombay University, India; M.S., CSU Los Angeles; M.S., M.A., Ph.D., USC.

BLICKLEY, JESSICA, Instructor, Division of Natural Sciences. B.A., Pomona College; Ph.D., UC, Davis.

BIRD, DEBORAH, Assistant Professor, Division of Engineering and Technology. Diploma, Calvin Grove College, Australia; M.A., UCLA.

BLATTI, JILLIAN, Assistant Professor, Division of Natural Sciences. B.S., University of So. Florida; M.S., Ph.D., UC San Diego.

BOBER, SHARON, Professor, Division of Mathematics and Computer Science. A.S., College of the Canyons; B.A., M.S., CSU, Northridge.

BOBICH, ANITA M., Assistant Professor, Division of Health Sciences. A.A., L.A. Harbor College; B.A., UCLA.

BOJARCAZAK, ANDRZEJ Z., Professor, Division of Languages. B.A., University of Wroclaw, Poland; M.S., CSU Fullerton.

BOLES, MARGARET, Instructor, Division of Mathematics and Computer Science, B.S., Cleveland State University; M.S., The Ohio State University.

BONILLA, MARTHA, Associate Professor, Division of Languages. B.A., UC Berkeley; M.A., UC Santa Cruz.

BORMAN, TERRI L., Assistant Professor, Division of Natural Sciences. B.S., UCLA; Doctor of Chiropractic, Cleveland Chiropractic College.

BOWER, SUSAN L., Professor, Division of Natural Sciences. B.S., UCLA; M.S., Ph.D., USC.

BRONSTEIN, DEBRA, Assistant Professor, Division of English. B.A., UC San Diego; M.A., UCLA; M.A., M.S., Oxford University, England.

BROWN, AKILAH S., Instructor, Division of English. B.A., University of Maryland; M.A., Iowa State University; A.B.D., University of Florida.

BURRES-JONES, CARA, Professor, Division of Natural Sciences. B.A., M.A., University of Kansas.

BUSTILLOS, ERNESTO, Assistant Professor, Division of Social Sciences. A.A., Pasadena City College; B.A., UCLA; M.A., M.P.A., University of Texas at Austin; M.A., Ph.D., UC Santa Cruz.

BUTLER, WALTER, Librarian II, Library. B.A., Temple University, Pennsylvania; M.A., UCLA.

CAIRO, EDUARDO A., Professor, Division of Social Sciences. B.A., UC Irvine; M.A., UCLA.

CANNON, SUNNY, Instructor, Division of Visual Arts and Media Studies. A.A.S., B.S., Fashion Institute of Technology, State University of New York.

CAPPARELLI, DEENA-LISA, Assistant Professor, Division of Visual Arts and Media Studies. B.F.A., CSU Long Beach; M.F.A., Claremont Graduate School.

CARMODY, BRIAN, Instructor, Division of Performing and Communication Arts. B.M., San Francisco State University; M.M., University of Southern California; D.M.A., USC.

CARPENTER, CHARLES, Instructor, Division of Performing and Communication Arts. B.A., CSU Northridge; M.M., USC.

CARREON, JUAN PABLO, Counselor, Counseling and Career Services. A.S., A.A., Pasadena City College; B.A., UCLA; M.S., CSU Long Beach.

CASCIONE, DOMENICO, Instructor, Division of Health Sciences. B.S., University of Southern Illinois.

CASTANON, JOSE, Instructor, Division of Mathematics and Computer Science. B.A., CSU Northridge; M.S., CSU Los Angeles.

CASTILLO, RICARDO A., Assistant Professor, Disabled Student Programs and Services. B.A., M.S., CSU Fresno.

CASTRO, PETER P., Assistant Professor, Division of Natural Sciences. B.S., CSU Los Angeles; Ph.D., UCLA.

CASTRO, JR., ISRAEL, Instructor, Division of Mathematics and Computer Science. A.A., Mt. San Antonio College; A.A., Community College of the Air Force; B.S., M.S., California State Polytechnic University, Pomona.

CATANESE, ERIKA, Instructor, Division of Natural Sciences. B.S., California Polytechnic State University, Pomona; M.S., CSU Fullerton.

CERVANTES, ROSEMARIE, Teacher Specialist-Disabilities, Disabled Student Programs and Services. B.A., California Polytechnic State University, Pomona; M.S., CSU Northridge.

CERVENKA, KATHY C., Professor, Division of Health Sciences. A.A., PCC; B.S.N., CSU Los Angeles; M.S.N., Azusa Pacific University.

CHAFFEE, LYMAN, Instructor, Division of Mathematics and Computer Science. B.A., Occidental College; M.A., Ph.D., UCLA.

CHAMMAS, DANY H., Instructor, Division of Natural Sciences. B.S., The Lebanese University (Lebanon); M.S., CSU Los Angeles.

CHANG, JOCELYN H., Instructor, Division of Performing and Communication Arts. B.F.A. National Taiwan Normal University, China; M.A. Johns Hopkins University, Maryland; D.M.A., USC.

CHEN, CHIA-WEI, Associate Professor, Division of Natural Sciences. B.A., UC Berkeley; Ph.D., USC.

CHENEY, KENNETH B., Professor, Division of Natural Sciences. B.A., UCLA; M.A., USC.

CHESS, BARRY R., Professor, Division of Natural Sciences. B.S., CSU Los Angeles; M.S., CSU Los Angeles.

CHEUNG, AMY H., Associate Professor and Counselor, Counseling and Career Services. B.A., CSU Los Angeles; M.A., UCLA.

CHEUNG, LILIAN, Instructor, School of Business, Engineering and Technology. B.A., UCLA; M.A., HEC Paris, France.

CHO, JAY, Assistant Professor, Division of Mathematics and Computer Science. B.S., M.S., UC Irvine.

CHOATE-CILETTI, ELISABETH A., Professor, Division of Natural Sciences. B.S., San Jose State University; Ph.D., USC.

- CHRISTENSEN, CARLA, Associate Professor, Division of Health Sciences. B.S.N., Loma Linda University. M.S., Azusa Pacific University.
- CLICK, JAMES, Instructor, Division of English. B.A., M.A., UC Berkeley.
- COBB, REBECCA, Dean of Student Life. B.A., UC San Diego; M.A., CSU Long Beach.
- COLE, DANIEL, Associate Professor, Division of Performing and Communication Arts. B.M., University of Southern Maine; M.S., Indiana University; D.M.A., USC.
- COLE, JEFFREY, Instructor, Division of Natural Sciences. B.S., UCLA; Ph.D., University of Kansas.
- CONNER, JOE W., Professor, Division of Natural Sciences. B.S., USC; Ph.D., UC San Diego.
- COOPER, REGENIA M., Counselor, Extended Opportunities Program and Services. B.A., UC Santa Barbara; M.S., CSU Los Angeles.
- CORRIE, CAROLYN, Instructor, Noncredit Division. B.A., Duke University; M.A., CSULA; J.D., The University of North Carolina at Chapel Hill, North Carolina.
- COTO, MONICA, Instructor, Division of Social Sciences. A.A., Cerritos College; B.A., M.A., CSU Fullerton; Ph.D., UCLA.
- COURTER, REBECCA E., Assistant Professor, Division of Mathematics and Computer Science. B.S., Point Loma Nazarene University; M.A., USC.
- CRANFILL, MICHAEL, Instructor, Division of Visual Arts and Media Studies. B.Arch., University of Kentucky, Lexington, KY; M.S., Columbia University, NY.
- CROOK, MARY-ERIN, Instructor, Division of Languages. B.A., University of Massachusetts; M.A. CSU Los Angeles.
- CUATT, DAVID A., Associate Professor, Division of Engineering and Technology. B.S., Rochester Institute of Technology.
- CURTIS, CAROL L., Professor, Division of Languages. B.A., UC Riverside; M.S., CSU Fullerton.
- D'AMICO, RITA, Associate Professor, Division of Languages. Laurea Italian Doctorate; M.A., Ph.D., UCLA.
- D'ORANGE-MARTIN, PATRICIA, Counselor and Assistant Professor, Counseling and Career Services. A.A., San Bernardino Valley College; B.A., M.S., CSU Los Angeles.
- DAVIDSON, KELLI E., Assistant Professor, Division of Social Sciences. A.A., PCC; B.A., CSU Long Beach; M.A., CSU Los Angeles; M.A., CSU Northridge.
- DAVIS, ANN, Associate Professor, Division of Mathematics and Computer Science, B.S., Brigham Young University; M.S., CSU Northridge; Ed.D., UCLA.
- DAVIS, JOHN Q., Instructor, Division of English. A.A., Pasadena City College; B.A., UC Irvine; M.A., California State Polytechnic University, Pomona.
- DEAN, MARIA FORTUNA, Instructor, Division of Performing and Communication Arts. B.M., Eastman School of Music; M.M., Curtis Institute of Music.
- DE CARVALHO, VALERIE, Professor, Division of Languages. B.A., CSU Long Beach; M.A., M.A. TESL, UCLA.
- DELMAN, ABBY, Instructor, Division of Social Sciences. B.A., UC Irvine; M.A., CSU Los Angeles.
- DEL REAL, ANTONIO, Counselor, Career Center. B.S., M.A., CSU Northridge.
- DESAI, ROHAN, Counselor, Counseling. B.S., California State Polytechnic University, Pomona; M.S., Cal State LA.
- DIEGUEZ, KIRIAKI KIKI, Instructor, Division of Health Sciences. A.S., Glendale Community College; B.S.N., M.S.N./F.N.P., Azusa Pacific University
- DI FIORI, RUSSELL E., Instructor, Division of Natural Sciences. B.S., UC Davis; M.S., San Diego State University.
- DODGE, AHNI D., Professor, Division of Business, B.S.B.E., M.S.B.E., University of North Carolina, Greensboro; Ed.D., USC.
- DOUGLAS, EARLIE B., Professor, Division of Business. B.S., M.S., Memphis State University.
- DOUGLASS, DAVID N., Professor, Division of Natural Sciences. B.S., UCLA; M.S., Ph.D., Dartmouth College.
- DUNBAR, BEVERLEY, Instructor, Division of Performing and Communication Arts. B.A., M.S., University of Redlands.

DUNN, KATHLEEN A., Instructor, Division of Social Sciences. B.A., University of Montana; M.A., Tufts University; Ph.D., CUNY.

DURAN, ARMANDO, Dean, Counseling and Student Success Services. B.S., CSU Northridge; M.S., CSU Los Angeles.

DUVALL, JACQUELINE A., Instructor, Division of Natural Sciences. B.S., CSU Long Beach; M.S., UCLA.

EGBUNIKE, INNOCENT IFEANYI, Instructor, Division of Kinesiology, Health and Athletics. B.A., M.A., Azusa Pacific University.

ENCINAS, JORGE, Assistant Professor, Division of Mathematics and Computer Science. B.A., M.S., CSU Northridge.

ENDRIJONAS, ERIKA, Superintendent/President. B.A., CSU Northridge; M.A., USC; Ph.D., USC.

ESTRADA-CEBALLOS, ANGELA, Instructor, Division of Mathematics and Computer Science. B.A., UCLA; M.A., CSU Fullerton.

EVANS, DAVID, Assistant Professor, Division of Business, - B.S. Christopher Newport College; M.S., Azusa Pacific University; M.S., UCLA.

EVERSOLE-CIRE, PAMELA, Associate Professor, Division of Natural Sciences. B.S., M.S., UC Irvine; Ph.D., USC.

FACCUSEH, MARIA, Associate Professor, Division of Mathematics and Computer Science. B.A., Mt. St. Mary's; M.S., USC.

FERNANDEZ, EMILY, Instructor, Division of English. B.A., UC Riverside; M.A., New York University.

FESER, EDWARD, Professor, Division of Social Sciences. B.A., CSU Fullerton; M.A., Claremont Graduate School; Ph.D., UC Santa Barbara.

FIEBIG, JENNIFER NEPPER, Instructor, Division of Social Sciences. B.S., CSU Northridge; M.A., Pepperdine University; Ph.D., University of Munich.

FIMBRES, FRED, Instructor/Coach. Division of Kinesiology, Health and Athletics. A.A., Cerritos College; B.A., M.A., Azusa Pacific University.

FLEMING, JOSHUA, Assistant Professor, Division of Performing and Communication Arts. B.S., Northern Arizona University, Flagstaff, AZ; M.A., CSU Los Angeles.

FLEMING, STEPHANIE, Dean, Instructional Services, Associate Professor, Division of Performing and Communication Arts. B.S., Northern Arizona State University; M.A., CSU Los Angeles.

FOLSOM, DEBRA, Assistant Professor, Division of Natural Sciences. B.A., Yankton College; Ph.D., University of Texas at Austin.

FONG, ELAINE J., Associate Professor, Division of Business. A.B., UC Berkeley; J.D., Hastings College of Law, UC San Francisco.

FOSTER, VALERIE, Associate Professor, Division of Natural Sciences. B.A., UC Berkeley; Ph.D., UC Irvine.

FOSTER, WILLIAM R., Associate Professor, Division of Visual Arts and Media Studies. B.A., Chapman College. J.D., Western State University College of Law.

FRANCOSO, ANTHONY, Instructor, Division of Social Sciences. B.A., M.A., CSU Los Angeles; M.A., Ph.D, UC Santa Barbara.

FRANK, RUSSELL A., Interim Associate Dean, International Education, Student Affairs. B.A., Northern Illinois University; M.A., Ph.D., UCLA.

FREUND, BARBARA M., Dean, Division of Health Sciences. B.S.N., Clayton University, St. Louis; M.S.N., Bellarmine College; Ph.D., Walden University.

FUKAZAWA, KEIKO, Associate Professor, Division of Visual Arts and Media Studies. B.F.A., Musashino Art University; M.F.A., Otis-Parsons School of Art and Design.

FUTTNER, JOSEPH L., Dean, Division of Visual Arts and Media Studies. B.A., University of Hartford; M.A., Hunter College, C.U.N.Y.; M.Phil., City University of New York Graduate Center.

GAGLIARDI, LORRAINE, Professor, Division of Health Sciences. A.A., PCC; B.S., USC; M.Ed., Ed.D., University of La Verne.

GALINDO, NATALIE, Instructor, Division of Performing and Communication Arts. B.A., M.A., CSU Los Angeles.

GALLON, DONALD, Associate Professor, Division of Engineering and Technology. B.S., CSU Los Angeles; J.D., Glendale University College of Law.

GALLUP, DANIEL B., Instructor, Division of Mathematics and Computer Science. B.A., Occidental College; M.Div., Fuller Seminary; M.S., CSU Los Angeles.

GANAPATHI, PADMA, Professor, Division of Natural Sciences. B.S., Nizam College, Osmania University, (India); M.S., Ph.D., University of Hyderabad, India.

GARCIA, RAELYNN, Instructor, Division of Mathematics and Computer Science. B.S., M.S., California State Polytechnic University, Pomona.

GARSON, JENNIFER, Instructor, Division of Languages. B.A., M.A., UCLA.

GASKIN, SHELLEY L., Professor, Division of Business, B.S., Robert Morris College, Pennsylvania; M.S., Northern Illinois University; Ed.D., Ball State University, Indiana.

GATES, STEVEN M., Instructor, Division of Performing and Communication Arts. B.M., University of Denver, CO; M.M., D.M.A., USC.

GILLETTE, JOHN ROBERT, Associate Dean, Learning Resources, Learning Assistance Center. B.A., New College of Florida; M.A., New Mexico State University; Ph.D., University of Pittsburgh.

GODIO, LAURA, Instructor, School of Humanities and Social Sciences. B.A., M.A., University of Udine, Italy; M.A., Ca' Foscari University of Venice, Italy.

GOGUEN, KRISTA F., Librarian II and Professor, Library Services. B.S., Cornell University; M.L.S., UCLA.

GONZALES, RITA, Instructor, Division of Performing and Communication Arts. B.A., UC San Diego; M.A., CSU Northridge.

GONZALEZ, BRYAN, Instructor, Division of English. B.A., M.P.W., University of Southern California.

GONZALEZ, MARINA ROSA, Counselor, Division of Counseling and Career Services. B.A., M.Ed., UCLA; Ed.D., University of Southern California (in progress).

GONZALEZ, OLGA M., Assistant Professor, Division of Languages. B.A., M.A., UCLA.

GRAHAM, DANIELLE, Instructor, Division of Social Sciences. B.A., U.C., Riverside; Ph.D., University of Sterling.

GRAVES, JERROLD, Associate Professor, Division of Visual Arts and Media Studies. B.A., Art Center, Pasadena.

GREEN, KATHLEEN, Professor, Division of English. B.A., Ohio State University; M.A., Ph.D., University of Wisconsin.

GREEN, MARCUS, Instructor, Division of Social Sciences. B.A., Fullerton College; M.A., University of Toronto; Ph.D., York University.

GUERRERO, RODGER J., Instructor, Division of Performing and Communication Arts. B.A., Loyola Marymount University; M.M., University of Miami; D.M.A., University of Southern California (in progress).

HAMMAN, DANIEL, Professor, Division of Social Sciences. B.A., Wheaton College, Illinois; M.S.S., United States Sports Academy, Alabama; M.A., CSU Los Angeles; J.D., University of La Verne.

HANLEY, JR., JOHN, Instructor, Division of Natural Sciences, B.A., Point Loma Nazarene College; M.S., Ph.D., The Pennsylvania State University.

HANVEY, DUSTIN, Professor, Division of English. B.A., UCLA; M.A., Ph.D., UC Riverside.

HARTMAN, MIRIAM, Instructor, Division of Natural Sciences. B.A., Columbia University in the City of New York; Ph.D., Massachusetts Institute of Technology, Massachusetts.

HATCH, NICHOLAS WADE, Instructor, Division of Kinesiology, Health and Athletics. B.S., Ph.D., University of Kentucky.

HAYNES, SANDRA C., Professor, Division of Visual Arts and Media Studies. A.A., PCC; B.A., San Diego State University; M.A., UCLA; M.A., CSU Los Angeles.

HENES, MATTHEW, Associate Professor, Division of Natural Sciences. A.S., Riverside Community College, Riverside, CA; B.S., UC Riverside, Riverside, CA; M.A., CSU San Bernardino; Ph.D., UCLA.

HENRY, MISTY L., Instructor, Division of Engineering and Technology. A.A., Pasadena City College.

HERNANDEZ, DANIELA M., Counselor, Counseling and Career Services. B.A., M.S., CSU Northridge.

HERNANDEZ-HENDERSON, BLANCA I., Counselor, Noncredit Division. A.A., PCC; B.S., M.S., University of La Verne.

HERRERA, TRISHA, Instructor, Division of English. B.A., CSU Long Beach; M.A., San Francisco State University.

HICKMAN, WILLIAM R., Instructor, Division of Performing and Communication Arts. B.F.A., University of Montevallo; M.F.A., UCLA.

HICKS, LENA, Librarian II, Library. B.A., M.L.I.S., UCLA.

HILEMAN-FORD, DEBORAH, Instructor, Division of Health Sciences. B.S., M.S., University of La Verne; M.S.N., University of Phoenix.

HINTZMAN, LINDA, Assistant Professor, Division of Mathematics and Computer Science. B.S., Oregon State University; M.S., UC Riverside.

HIRAI, RITSUKO, Professor, Division of Languages. B.A., Kyoto University (Japan); M.A., Ph.D., USC.

HOGAN, MONIKA, Associate Professor, Division of English. B.A., University of Michigan at Ann Arbor; M.A., Ph.D., University of Massachusetts at Amhurst.

HOGUE, CHARLES N., Instructor, Division of Mathematics and Computer Science. A.A., Orange Coast College; B.S., California Polytechnic State University, San Luis Obispo; M.A., CSU Long Beach.

HOGUE, M. KATHLEEN, Professor, Division of Mathematics and Computer Science. B.S., California Polytechnic University, Pomona; M.A., UCLA.

HOLUB, DOUGLAS F., Instructor, Division of Natural Sciences. B.A., B.S., Ph.D., University of Kansas.

HONG, VIVIANA NATALIA, Instructor, Division of Languages. B.A., Brown University; M.A., UC Santa Barbara; Ph.D., University of Chicago.

HORTON, GLORIA, Instructor, Division of English. A.A., PCC; B.A., Pitzer College; M.A. Chapman College.

HOULIHAN, WAYNE P., Assistant Professor, Division of Engineering and Technology. A.A., PCC; B.V.E., CSU Los Angeles.

HOUSE, MARTHA, Professor, Division of Natural Sciences. B.S., University of Michigan; Ph.D., M.I.T.

HUBER, KERIN, Professor, Division of Natural Sciences. B.S., Caltech; M.S., CSU Los Angeles.

HUFFMAN, MARY, Instructor, Division of Health Sciences. A.D.N., Rio Hondo College; B.S.N. CSU Long Beach; M.S., University of Phoenix.

HUH, JASON Y., Associate Professor, Division of Business, B.E., Korea University; B.S., St. Edwards University; M.S., Purdue University.

HUNKINS, SUSAN, Associate Professor, Noncredit Division. B.A., CSU Sacramento; B.S., Weber State College, Utah; M.A., Ph.D., University of Hawaii, Hawaii.

HUPP, JEFF, Counselor, Counseling and Career Services. B.A., CSU San Bernardino; M.S., CSU Northridge.

HWANG, JOSEPH W., Instructor, Division of Social Sciences. B.A., UC Irvine; B.A., CSU Fullerton; M.A., Ph.D., UCLA.

HYATT, KRISTIN, Instructor, Division of Health Sciences. B.S.N., UCLA; M.S.N., University of Phoenix.

IGOE, JESSICA C., Assistant Professor, Division of Natural Sciences. B.S., Walla Walla College, Washington; Ph.D., Loma Linda University.

INGRAM, MICHELLE M., Instructor, Division of Mathematics and Computer Science. B.A., M.S., Northwestern University; M.A., CSU Fullerton.

IRELAND-GALMAN, MICHELLE, Professor, Division of Social Sciences. A.A., PCC; B.A., M.A., CSU Long Beach; Ph.D., USC.

IWANICKI, SUZANNE, Instructor, Division of Mathematics and Computer Science. B.S., UC Santa Barbara; M.A. Roehampton University, London.

JACKERSON, JUSTIN L., Instructor, Division of Languages. B.A., M.A., Gallaudet University.

JANG, LINDSEY, Instructor, Division of Visual Arts and Media Studies. B.A., UC Berkeley; M.F.A., USC.

JARAMILLO, VERONICA, Assistant Professor, Division of Natural Sciences. B.S., Moravian College; Ph.D., University of Arizona.

JARSO, HILLINA Y., Counselor, Counseling and Career Services. B.A., M.S., CSU Long Beach.

JENSEN, BARRY JAY, Instructor, Division of Health Sciences. A.A, Santa Monica College.

JOHNSON, CJ, Professor, Division of Languages. B.A., University of Nebraska; M.A., UCLA.

- JOHNSON, SHANNON, Coordinator, Work Experience Education, Division of Engineering and Technology. B.A., USC; M.A., Ed.D. CSU Northridge.
- JOHNSTON, BRADFORD, Instructor, Division of Social Sciences. B.A., UC Santa Cruz; M.A., CSU Stanislaus.
- JUGE, TONY, Associate Professor, Division of Social Sciences. A.A., Universite Paris XI, Sceaux, France; B.A., M.A., Universite Paris III, Sorbonne, France; M.A., CSU Fullerton; Ph.D., UC Riverside.
- KAMANDY, MASOOD, Instructor, Division of Visual Arts and Media Studies. B.F.A., School of Visual Arts; M.F.A., UCLA.
- KASFY, HASSAN, Assistant Professor, Division of Natural Sciences. B.S., UCLA; M.A., California Polytechnic State University, Pomona.
- KATRJYAN, MARIAM, Instructor, Division of Business. B.S., CSU Los Angeles; M.B.A., University of La Verne.
- KAUK-PEPPLE, JENNIFER, Instructor, Division of Natural Sciences. B.S., M.S., CSU Long Beach.
- KAWAOKA, APRIL, Instructor, Division of Visual Arts and Media Studies. B.F.A., CSU Long Beach; M.A., University of Massachusetts Dartmouth, Massachusetts.
- KAZ, KRISTIN, Instructor, Division of Social Sciences, B.A., M.A., Cal-State, Northridge.
- KELLOGG, CAROL D., Professor, Division of Business, B.A., University of La Verne; J.D., University of LaVerne, Law School.
- KENNEDY, BRIAN, Professor, Division of English. B.A., Cedarville College, Ohio; M.A., Wright State University, Ohio; Ph.D., Miami University, Ohio.
- KETTLE, LAURINDA M., Assistant Professor, Division Health Sciences. A.A., PCC; B.S.N., CSU Long Beach; M.S.N., Azusa Pacific University.
- KIM, JENNI K., Associate Professor, Division of Social Sciences. B.A., UC Berkeley; M.A., Ph.D., Columbia University, New York.
- KIM, SUNG H., Associate Professor, Division of Social Sciences. B.A., Seoul National University, Seoul, Korea; M.A., Columbia University, New York; M.S., Ph.D., Claremont Graduate University.
- KIOTAS, ARGIRO (JULIE), Dean, Division of Business and Engineering Technology. B.A., UC Irvine; M.A., CSU Long Beach; Ph.D., University of Delaware.
- KIRKBRIDE, CORRINE R., Instructor, Division of Mathematics and Computer Science. B.S., UC Santa Barbara; M.A., UC Davis.
- KISS, BOGLARKA, Associate Professor, Division of Performing and Communication Arts. B.A., Whittier College; M.F.A., UC Irvine; M.A., Stanford University; D.M.A. Boston University.
- KISSEL, BARBARA, Associate Professor, Division of Health Sciences. A.A., PCC; B.S., University of St. Francis.
- KLEIN, BROCK, Associate Dean, Pathways & Professional Learning. B.F.A., University of Michigan, Ann Arbor; M.S., USC; Ph.D., UCLA.
- KNOTT-SILVA, TAMARA, Instructor/Coach, Division of Kinesiology, Health and Athletics. A.A., Citrus College; B.A., M.A., Southeastern Louisiana University.
- KOONTZ, JENNIFER, Instructor, Division of Social Sciences. B.A., CSU Long Beach; M.A., Pepperdine University; Ph.D., UC Riverside.
- KOTTARAS, EKATERINI B., Assistant Professor, Division of English. B.A., University of Illinois at Urbana-Champaign; M.A., UC Irvine.
- KOUANCHAO, KETMANI, Associate Dean, Special Services. B.A., M.Ed., University of Minnesota; Ed.D., CSU Fullerton.
- KOUBEK, PAULETTE, Instructor, Division of Languages. B.A., Cleveland State University; M.A., University of Illinois at Urbana-Champaign.
- KRISTEN, JENS, Instructor, Division of Mathematics and Computer Science. B.A., M.S., CSU Los Angeles.
- KRYCZKA, ANNA, Instructor, Division of Social Sciences. B.A., Knox College; M.A., School of the Art Institute of Chicago; Ph.D., UC Irvine.
- KUROKI, MIKAGE, Associate Professor, Division of English. B.S., B.A., USC; M.A., CSU Long Beach; Ph.D., U.C. Riverside.
- KURZE, HEATHER, Instructor, Division of Visual Arts and Media Studies. A.B., Columbia University; M.A., UCLA.

LARSON, ERIC, Instructor, Division of Performing and Communication Arts. A.A., Santa Ana College; B.A., San Francisco State; M.F.A., UCLA.

LAW, SEBRENIA, Instructor, Division of Health Sciences. B.S. Southern Illinois University, Carbondale, IL; M.S. Azusa Pacific University.

LAYTON, BOBBI A., Executive Director, Foundation. A.A., Evangel University, B.A., Avila College.

LEE, DAEHWAN, Associate Professor, Division of Social Sciences. A.A., L.A. Valley College; B.A., M.A., UCLA.

LEE, MICHELLE B. Assistant Professor, Division of Business. B.A., B.S., USC; M.B.A., Claremont Graduate University.

LEE, ROBERT, Assistant Professor and Coordinator, Writing Center, Division of English. B.A., UCLA; M.A., USC.

LEE, SANDY, Assistant Professor, Division of Engineering and Technology. Bachelor of Architecture, So. California Institute of Architecture; M.S., Columbia University.

LEI, LI H., Instructor, Division of Business, B.S., CSU Los Angeles; M.S., UC Davis.

LELOO, LYNN M., Instructor, Division of Health Sciences. A.A., A.S., Pasadena City College; B.A., University of Minnesota.

LENG, XIAODAN, Professor, Division of Mathematics and Computer Science. B.S., Huazhong University of Science and Technology, China; M.S., CSU Los Angeles; Ph.D., UC Irvine.

LEGG, BEVERLY, Instructor, Division of Health Sciences. A.S., PCC; B.S., M.S., University of La Verne.

LEON, JUAN R., Instructor, Division of Business. B.S., M.E., UCLA; M.S., CSU Long Beach; M.S., UC Riverside.

LING, SUSIE H., Associate Professor, Division of Social Sciences. B.A., M.A., UCLA; M.A., CSU Los Angeles.

LIU, WAI-MIN, Professor, Division of Natural Sciences. B.S., M.S., CSU Northridge; Ph.D., Nankai University, Nankai, China.

LOPEZ, CAROLINA, Instructor, Division of English. B.A., M.A., CSU, Long Beach.

LOPEZ, GENA L., Counselor, Counseling and Career Services. A.A. PCC; B.A., UC Riverside; M.S., University of LaVerne.

LORITSCH, CHRISTINE C., Instructor, Division of Mathematics and Computer Science. B.S., UC Riverside; M.Ed, M.A., UCLA.

LUCK, KYLE, Associate Professor, Division of Performing and Communication Arts. B.M., CSU Northridge; M.M., USC.

LUCKO, WENDY, Instructor, Division of Engineering and Technology. A.S., Pasadena City College.

LUTTRELL, HOLLIE, Associate Professor, Division of Visual Arts and Media Studies. A.A., Fashion Institute of Design and Merchandising; B.A., B.S., CSU Los Angeles; M.S., CSU Northridge; Ph.D, USC.

MACHEN, DAVID PETER, Instructor, Division of Performing and Communication Arts. B.A., M.A., UCLA;

MACK, DARCY, Professor, Division of Natural Sciences. B.S., M.S., UCLA.

MAGEE, CATRELIA R., Professor, Division of Natural Sciences. B.A., CSU Los Angeles; M.A., Mills College.

MAHER II, THOMAS F., Instructor, Division of Kinesiology, Health and Athletics. B.A., CSU Los Angeles.

MARES, MICHAELA J., Director, Student Equity, Student Services. B.A., UC Berkeley; M.A., Cal State L.A.; Ph.D., UCLA.

MARHEINE, ROGER C., Assistant Professor, Division of English. B.A., M.A., University of Wisconsin.

MARSHALL, STEPHANIE, Instructor, Division of Business, B.A., UC Riverside; J.D., Indiana University.

MARTINEZ-KAUFMAN, LILIANA, Instructor, Noncredit Division. B.A., CSU Northridge; M.A., CSU Los Angeles.

MATTHEWS, DAVID, Instructor, Division of Mathematics and Computer Science. B.S., M.S., University of Nebraska-Lincoln, Nebraska.

MATTHEWS, ZACHARY P., Instructor, Division of Performing and Communication Arts. B.M., B.A., Washington State University; M.M., USC.

McGAHARN, ANGELA C., Associate Professor, Division of Languages. A.A. Santa Monica College; B.S., UC Davis; M.A., University of the Pacific, Stockton.

McGEE, PATRICK, Instructor, Division of Kinesiology, Health and Athletics. B.A., M.A., Azusa Pacific University.

McGUIRE, KATHRYN, Librarian II, Library, B.A., UC Santa Cruz; M.L.I.S., UCLA.

McINTIRE, NATHAN, Instructor, Division of Visual Arts and Media Studies. B.A., Pomona College; M.A., USC.

McKAY, YOLANDA, Instructor, Division of Visual Arts and Media Studies. B.A., California State Polytechnic University, Pomona; M.F.A., CSU Fullerton.

McQUEEN, MARK M., Assistant Professor, Division of English. B.A., UCLA; M.A., CSU Long Beach.

MEDINA, CECILIA D., Counselor, Counseling and Career Services. A.A. LACCD; B.A., UC Davis; M.A., San Diego State University, Ed.D., San Diego State University.

MEKHITARIAN, AZNIV, Instructor, Division of Social Sciences. B.A., UCLA; M.A., CSU Northridge.

MELNARIK, TIM, Assistant Professor, Division of English. B.A., UC Riverside; M.A., USC; Ph.D., Claremont Graduate University.

MENDOZA, JUAN MANUEL, Instructor, Division of English. A.A. Pasadena City College; B.A., M.A., CSU Los Angeles.

MENDOZA, MARYROSE, Associate Professor, Division of Visual Arts and Media Studies. B.A., CSU Los Angeles; M.F.A., Claremont Graduate School.

MICHEL, PATRICIA, Assistant Professor, Division of Mathematics and Computer Science. A.S., Santa Ana College; B.S., M.S., UC Irvine; Ph.D., Georgia Institute of Technology.

MICHELSON, MELISSA, Associate Professor, Division of Languages. B.A., UC Berkeley; M.A., CSU, Los Angeles.

MILLER, DYAN RENEE PHILLIPS, Dean, Division of Kinesiology, Health and Athletics. A.A., Moorpark College; B.A., M.A., CSU Chico; M.A., CSU Long Beach.

MILLER, JONATHAN, Instructor, Division of Social Sciences. B.A., M.A., Ph.D., Bowling Green State University, Ohio.

MILNE, DEREK, Assistant Professor, Division of Social Sciences. B.A., UC Santa Cruz; M.A., Bowling Green State University; M.A., UCLA.

MITTONGTARE, CHURAIRAT, Instructor, Division of Health Sciences. B.S.N., M.S.N., Mahidol University (Bangkok, Thailand).

MOORE, BILL, Associate Professor, Division of Kinesiology, Health and Athletics. B.S.E., Northwest Missouri State, M.S., Louisiana Tech University.

MORALES, MARIBEL, Counselor, Extended Opportunity Programs and Services. B.A., M.A., CSU Los Angeles; Ph.D., Alliant International University.

MORRIS, REBECCA J., Professor Division of Visual Arts and Media Studies. B.A., Smith College; M.F.A., The School of the Art Institute of Chicago.

MUNGEN, DONNA, Assistant Professor, Division of English. B.A., Howard University; M.F.A., Antioch University, Los Angeles.

MUNO, SARAH, Instructor, Division of Social Sciences. B.A., San Francisco State University; M.A., Western Michigan University; Ph.D., Southern Illinois University (in progress).

MURRAY, ANDREA, Instructor, Division of Social Sciences. B.A., San Diego State University; M.A., CSU Fullerton.

MUYINGO, JOYCE, Instructor, Division of Health Sciences. A.A., PCC; M.S.N., UCLA.

NAGY-SHADMAN, ELIZABETH, Associate Professor, Division of Natural Sciences. B.A., University of Colorado; M.S., Ph.D., California Institute of Technology.

NAZARIAN, RITA, Instructor, Division of Health Sciences. B.S., University of Southern California; M.S., Western University of Health Sciences

NAYLOR, BARBARA, Associate Professor, Division of Performing and Communication Arts. A.A., A.S., Pasadena City College; B.A., USC; M.A., CSU, Los Angeles.

NEWMAN-GOMEZ, SHARON, Assistant Professor, Division of Mathematics and Computer Science. B.S., B.A., M.A., CSU San Bernardino; M.S., UC Riverside.

NGO, BENSON, Instructor, Division of Natural Sciences. B.A., Claremont McKenna College; Ph.D., UCLA.

- NIELSEN, DONNA M., Assistant Professor, Division of Health Sciences. A.A., Citrus College; B.S.N., M.S.N., University of Phoenix.
- NOBLE, JENNIFER, Associate Professor, Division of Social Sciences. B.A., Andrews University, Michigan; M.A., Ph.D., Alliant International University.
- NORDSTROM, DONNA E., Professor, Division of Mathematics and Computer Science. Wheaton College; M.A., UCLA; M.S., Azusa Pacific University.
- NUTTALL, ADORA, Instructor, Division of Social Sciences. B.A., M.A., CSU Los Angeles.
- NWANERI, ORONNE CHIMZI, Coordinator, Upward Bound Program. B.A., California State Polytechnic University, Pomona; M.S., CSU Fullerton.
- NYONG, FRANCIS E., Assistant Professor, Division of Social Sciences. B.A., M.B.A., Azusa Pacific University; M.A., Ph.D., Claremont Graduate School.
- O, JEONG K., Professor, Division of Health Sciences. B.S.N., Ewha Woman's University, (Korea); M.S.N., University of Hawaii.
- OBERLANDER, KEITH J., Professor, Division of Mathematics and Computer Science. B.S., Illinois State University; M.S., Purdue University; M.A., Northwestern University; Ph.D., USC.
- OCEGUEDA, ISELA, Dean, Division of English. A.B., Princeton University; M.Ed., Harvard University; Ph.D., UC Santa Cruz
- OGDEN, KRISTEN, Associate Professor, Division of English. A.A., Skyline Community College, San Bruno, CA; B.A., San Francisco State University; M.F.A., University of Alaska, Fairbanks, AK; Ph.D., Louisiana State University.
- O'LEARY, CHRISTOPHER, Instructor, Division of Visual Arts and Media Studies. B.A., University of Washington; M.A., UCLA.
- OLIVO, CYNTHIA, Associate Vice President, Student Affairs. B.A., M.S., CSU, San Bernardino; Ph.D., Claremont Graduate University, Claremont.
- OROZCO, ENRIQUE C., Professor, Division of Social Sciences. B.A., CSU Northridge; Ph.D., USC.
- O'CONNOR, YUET-LING, Professor, Division of Natural Sciences. B.A., CUNY; Ph.D., USC.
- OSAKA, RICHARD, Instructor, School of Division of Visual Arts and Media Studies. A.A., PCC; B.F.A., Art Center College of Design.
- OVENTILE, ROBERT S., Associate Professor, Division of English. B.A., UC Berkeley; M.A., UC Irvine.
- PANGAN, BRIAN J., Counselor, Noncredit Division. B.S., M.S., CSU Los Angeles.
- PARKER, ALLISON, Instructor, Division of English, B.S., M.A., M.Ed., Ph.D., ASU.
- PEDRINI, MICHELE, Professor, Division of Languages. B.A., M.A., Ph.D., UCLA.
- PEHLIVANOVA, MARIA, Assistant Professor, Division of Languages. B.A., Saint Kliment Ohridski Sofia University, Bulgaria; M.A., California State Polytechnic University, Pomona.
- PELL, STEVE, Associate Professor, Division of Languages. B.A., M.A., CSU Los Angeles; M.A., California State Polytechnic University, Pomona.
- PERALES, OTILIO, Assistant Professor, Division of English. B.A., UCLA; M.A., CSU Los Angeles.
- PEREA, MANUEL, Instructor, Division of Visual Arts and Media Studies. B.A., CSU Long Beach; M.A., CSU Los Angeles.
- PERON, JOSEPH, Instructor/Coach, Division of Kinesiology, Health and Athletics. A.A., PCC; B.A., Biola University; M.A., Azusa Pacific University.
- PERSAUD, LOKNATH, Professor, Division of Languages. B.A., University of West Indies; M.A., Ph.D., State University of New York at Buffalo.
- PHU, CINDY, Assistant Professor, Division of Performing and Communication Arts. B.A., CSU Long Beach; M.A., CSU Los Angeles.
- PILON, KRISTIN F., Professor, Division of Engineering and Technology. B.A., St. Olaf College; M.A., California Lutheran University.
- POTTER, CHARLENE, Associate Professor, Division of Languages. B.A., University of Ottawa, Ontario, Canada; M.A., Carleton University, Ontario, Canada.
- POWERS, JAMES R., Associate Professor, Division of Business, B.A., M.A., San Jose State University; Ph.D., UCLA.

PRADO, ROSA A., Counselor, Counseling and Career Services (EOPS/CARE). B.A., UCLA; M.S.W., Ed.D., University of Southern California.

PRESIADO, RHEA, Associate Professor, Division of Natural Sciences. B.A., UC Berkeley; Ph.D., UC Davis.

PRESTON, JENNIFER BRIGHT, Instructor, Division of Social Sciences. B.A., Mt. Saint Mary's College; M.A., Ph.D., Claremont Graduate University.

PRICE, PAUL, Instructor, Division of Social Sciences. B.A., University of Redlands; M.A., Fisk University, Tennessee; Ph.D., UCLA.

PUGLIA, KAITZER, Professor, Division of Social Sciences. A.A., Glendale Community College; B.A., CSU Northridge; M.A., Pacific Oaks College.

QUAN, (JENNY) JIA, Professor, Division of Natural Sciences. B.S., Fudan University (China); M.S., CSU Los Angeles.

RADDON, DANIEL, Assistant Professor, Division of Business, B.A., Brigham Young University; M.B.A., Arizona State University; M.I.M., American Graduate School of International Management.

RAMOS, ANA, Counselor/Articulation Officer and Professor, Counseling and Career Services. A.A., Chaffey College, Rancho Cucamonga; B.A., CSU San Diego; M.A., Pt. Loma College, San Diego.

RANDALL, ROBERT L., Instructor, Division of Social Sciences. M.S., CSU Los Angeles; B.A., M.A., Ph.D., UCLA.

RAPUE, DANIELLE MARILY SUSANA, Librarian III, Library. A.S., Fresno City College; B.A., CSU Fresno; M.S., San Jose State University.

REGAN, PHILIP G., Assistant Professor, Division of Social Sciences. B.A., College of Wooster; M.A. Claremont Graduate University.

REGANIAN, ADRINE A., Instructor, Division of Health Sciences. B.S., USC; M.A. Western University of Health Sciences.

REINHART, LIESEL A., Dean, Division of Performing and Communication Arts. B.S., University of Colorado, M.P.S., Cornell University.

RICHARDS, JUSTUS A., Assistant Professor, Division of Social Sciences. B.A., Loma Linda University; M.A., Andrews University, Berrien Springs, Michigan; M.A., USC.

RIGON, SILVIA, Assistant Professor, Division of Visual Arts and Media Studies. B.F.A., Accademia Di Belle Arti, Venezia, Italy; M.F.A., UCLA.

RILEY, PETE, Instructor, Division of Mathematics and Computer Science. B.A., UCLA.

RIOJAS, TOMAS S., Counselor, Counseling and Career Services. B.A., CSU Los Angeles; M.Ed., University of Maryland.

RIVAS-GOMEZ, ELSIE, Associate Professor, Division of English. B.A., B.S., Santa Clara University; M.F.A., San Diego State University.

RIVERA, MARGARITA, Coordinator Student Support Services (PASS), Student Affairs. B.A., Mount St. Mary's College; M.A., CSU Long Beach.

ROCK, PATRICK, Instructor, Division of Social Sciences, B.A., Swarthmore University; M.A., Ph.D., UCLA.

RODRIGUEZ, BLANCA, Instructor, Division of Health Sciences. A.A., Santa Monica College; B.A., UC Riverside.

RODRIGUEZ, KATHARINA, Assistant Professor, Division of Natural Sciences. B.S., M.S., California State Polytechnic University.

ROGACS, LYNORA, Associate Professor, Division of Social Sciences. B.A., Scripps College; M.A., Claremont Graduate University.

ROIG, SUSAN, Associate Dean, Distance Education. B.A., University of Portland, Orlando; M.A. CSU Fullerton.

ROMERO, DENISE, Associate Professor, Division of Health Sciences. A.A. Cerritos College; B.S., Everest University, Tampa, FL.

ROSAS, IVETTE H., Counselor and Associate Professor, Counseling and Career Services. B.A., USC; M.S. San Francisco State.

ROSE, SHELAGH E., Professor, Division of Languages. B.A., UC San Diego; M.A., San Diego State University.

- RUIZ, LINDSEY A., Instructor, Division of Languages. B.A., UC Irvine; M.A., California State Polytechnic University, Pomona.
- RUTZEN, NANCY, Instructor, Division of Languages. B.A., CSU Los Angeles; M.A. Azusa Pacific University.
- SACHTJEN, TRACY, Assistant Professor, Division of Social Sciences. B.A., Smith College, Northampton, MA; M.A., Ph.D., UC Irvine.
- SAGHIANS, HENRY, Instructor, Division of Health Sciences. M.A. South Baylo University.
- SAHAKYAN, SUREN, Instructor, Division of Business, M.S., CSU Los Angeles.
- SAKATA, MARK, Teacher/Specialist - Disabilities and Associate Professor, DSP&S. B.A., M.S., University of North Carolina at Chapel Hill.
- SALAZAR-ROMO, CRISTINA, Associate Professor, Division of Languages. A.A., Cerritos College; B.A., M.A., California Polytechnic State University, Pomona; Ed.D., USC.
- SALLER, BRANDON D., Instructor, Division of Business, Engineering, and Technology, B.S., UC Irvine; Ph.D., UC Davis.
- SAMSON, YULIANA VALDES, Instructor, Division of English. B.A., M.A., Cal State LA.
- SAMTANI, SHELLIE A., Instructor, Division of English. A.A. Pasadena City College; B.A., M.A., CSU Los Angeles.
- SANCHEZ, DEANNA LYN, Instructor, Division of Health Sciences. A.A. and A.S., Daytona Community College; B.S.N., M.S.N./F.N.P., University of Phoenix.
- SANCHEZ, MANUEL, Instructor, Division of Languages. B.A., University of San Diego; M.A., UC San Diego; M.F.A., University of Illinois at Urbana-Champaign.
- SCHMIDT, STEPHANIE, Professor, Division of Health Sciences. A.A., Los Angeles Mission College; B.A., CSU Dominguez Hills; M.S., Boise State University.
- SCHUBERT, JAMES R., Associate Professor, Division of Mathematics and Computer Science. B.A., UCLA; M.S., CSU Los Angeles.
- SCOTT, ROSEMARY, Associate Professor, Division of Performing and Communication Arts, DSP&S. B.A., University of Redlands; M.A., CSU Los Angeles.
- SEPIKAS, JOHN P., Professor, Division of Mathematics and Computer Science. B.S., M.S., CSU Northridge; Ph.D., Claremont Graduate University.
- SEROPIAN, TALEEN, Counselor, Counseling and Career Services. B.A., UC San Diego; M.S., CSU Long Beach.
- SHAMAM, ASHER, Instructor, Division of Mathematics and Computer Science. B.S., M.S., UCLA; M.A., Ph.D., USC.
- SHEDIAK, KIMBERLY, Instructor, Division of Business. B.A., University of Tampa; M.B.A., Thunderbird School of Global Management; Ed.D., Pepperdine University.
- SHI, JIA, Professor, Division of Natural Sciences. B.S., Fudan University; M.S., Ph.D., UCLA.
- SHIN, ALBERT, Instructor, Division of Social Sciences. B.A., UCLA; M.T.S., Boston University; Ph.D., UC Santa Barbara.
- SHIN, HENRY, Instructor, Division of Performing and Communication Arts. B.A, UC Berkeley; M.A., USC.
- SIMON, KENNETH, Librarian II, Library Services. B.A., UC Santa Cruz; M.L.I.S., UCLA.
- SINCLAIRE, MAHARA T., Instructor, Division of Visual Arts and Media Studies. B.A., UC Davis; M.F.A., CSU Los Angeles.
- SKIATHITIS, KARYN, Instructor, Division of Health Sciences. B.S.N., University of Massachusetts Amherst; M.S.N. CSU Los Angeles.
- SLOCUM, RICHARD, Teacher Coordinator, Noncredit Division. B.S., Ph.D., Massachusetts Institute of Technology.
- SMITH, MARJORIE, Associate Professor, Division of English. B.A., M.A., CSU Los Angeles.
- SOCRATES, JUDE THADDEUS, Professor, Division of Mathematics and Computer Science. B.S., University of the Philippines, Quezon City; M.S., University of the Philippines, Quezon City, and Caltech; Ph.D., Caltech.
- SOO HOO, PAULINE, Instructor, Division of Health Sciences. B.S.N., University of San Francisco; M.N., UCLA.
- STARBIRD, CARRIE A., Associate Dean, Division of Mathematics and Computer Science. B.S., California Polytechnic State University, San Luis Obispo; M.S., California State Polytechnic University, Pomona.

- STAYLOR, DANIEL, Instructor, Division of English. B.F.A., B.A., University of Colorado at Boulder; M.A., Syracuse University; M.A., California State Polytechnic University, Pomona.
- STEPHENS, CARMEN, Counselor, Counseling and Career Services (DSPS). B.S., CSU Fullerton; M.S., CSU Los Angeles.
- STODDARD, TERRY W., Instructor/Coach, Division of Kinesiology, Health and Athletics. B.S., M.A., Eastern Kentucky University.
- STRINDEN, CHRISTOPHER N., Instructor, Division of Mathematics and Computer Science. B.A., M.S., Western Washington University.
- SUMITOMO, MIKI, Professor, Division of Languages. B.A., Kwansei Gakuin University (Japan); B.A., University of Oregon; M.Ed., Ph.D., Boston University.
- SUPEKAR, SIMONA, Instructor, Division of English. B.A., Oberlin College; M.F.A., UC Riverside.
- SURENYAN-KRECH, TATYANA, Assistant Professor, Division of English. B.A., M.A., CSU Northridge.
- SWAIN, KATHERINE, Counselor, Counseling and Career Services. B.A., CSU Los Angeles; M.S.W., USC.
- SWAMINATHAN, VANITHA, Assistant Professor, Division of English. B.A., Ranchi University, India; B.Ed., Bombay University, India; M.Ed., University of Sheffield, UK.
- SWANEGAN, MICHAEL, Instructor/Coach, Division of Kinesiology, Health and Athletics. A.S., Paris Junior College, Texas; B.S., Langston University, Oklahoma; M.A., Azusa Pacific University.
- SWEIMEH, KHULOUD, Professor, Division of Natural Sciences. B.S., University of Jordan, Jordan; Ph.D., UC Irvine.
- SWIL, WARREN, Assistant Professor, Division of Visual Arts and Media Studies. B.S., University of Cape Town, South Africa; B.A., San Diego State University; M.A., CSU, Los Angeles.
- SY, JAMES, Professor, Division of Natural Sciences. B.S., University of Santo Tomas (Philippines); M.S., Eastern Illinois University; Ph.D., Iowa State.
- SYMS, WILLIAM ELLIOT L., Talent Search Coordinator, Student Services. B.A., Clark Atlanta University; M.P.A., Cal State Northridge.
- TAKATA, YOJI, Assistant Professor, Division of Languages. B.A., M.A., Sophia University, Tokyo, Japan; M.A., Ph.D., University of Tennessee at Knoxville.
- TALAO, SILVIA, Assistant Professor, Division of Mathematics and Computer Science. A.A., College of the Canyons; B.A., M.S., CSU, Northridge.
- TANTLINGER, MONICA, Instructor, Division of Kinesiology, Health and Athletics. B.A., CSU Fullerton; M.A., Texas Woman's University, Denton.
- TAY, GIDGET, Instructor, Division of Natural Sciences. B.S., UC, San Diego; Ph.D., UC, Irvine.
- TAYLOR, DARYL J., Associate Professor, Division of Kinesiology, Health and Athletics. B.A. University of Pennsylvania, Philadelphia; M.B.A., Wharton School of Business, Philadelphia.
- TERRILL, MICHAEL CHRISTOPHER, Instructor, Division of Kinesiology, Health and Athletics. B.A., USC; M.A., San Diego State University.
- THOEN, THOMAS ALAN, Instructor, Division of Engineering and Technology. B.S., M.S., California State Polytechnic University, Pomona.
- THONGTHIRAJ, DOOTSDEEMALACHANOK, Professor, Division of English. B.A., M.A., Ph.D., UCLA.
- TIRAPELLE, LESLIE A., Dean, Library and Distance Education. B.A., UC San Diego; M.L.I.S., San Jose State; Ed.D., USC.
- TORRES-RETANA, RAQUEL, Director Rosemead Site. B.A., Whittier College; M.A., CSU Dominguez Hills; Ph.D., USC.
- TOSCANO, SILVIA, Associate Professor, Division of Social Sciences. A.A., Mount San Antonio College; B.A., M.A., CSU Los Angeles.
- TRAN, JENNIFER LILY, Counselor, Counseling and Career Services. B.A., UC Riverside; M.Ed., University of Southern California.
- TRENDLER, TERESA A., Professor, Division of Natural Sciences. B.S., Biola University; M.S., San Diego State University.
- TRUONG, LAN, Counselor and Assistant Professor, Counseling and Career Services. B.A., M.S., CSU Long Beach.

- TSAO, MING-YAO, Associate Professor, Division of Health Sciences. B.S.N., CSU Los Angeles; M.S.N., UCLA.
- TUCKER, BRIAN, Associate Professor, Division of Visual Arts and Media Studies. B.A., Pitzer College; B.F.A., M.F.A., California Institute of the Arts.
- TUCKER, JACOB T., Instructor, Department of Engineering and Technology. A.S., Mount SAC; B.S., M.A., Cal State LA.
- TYBERG, JOHN, Instructor, Division of English. B.A., M.A., CSU Long Beach.
- UDEOZOR, VALERIE, Assistant Professor, Division of Health Sciences. A.A., Mount St. Mary's College; B.A., Howard University; M.S.N., University of Phoenix.
- UNDERWOOD, SHANE, Associate Professor, Division of English. B.A., M.A., CSU Northridge; Ph.D., CSU Northridge.
- URANGA, DAVID J., Assistant Professor, Division of Social Sciences. B.A., CSU Northridge; M.A., UCLA.
- VALENTINE, JESSICA, Instructor, Division of Mathematics and Computer Science. B.S., M.S., California State Polytechnic University, Pomona.
- VALENTINE, SONYA, Associate Professor, Division of Natural Sciences. B.S., M.S., CSU Los Angeles.
- VAN CORVA, CLAUDIA, Professor, Division of Natural Sciences. B.A., CSU Northridge, M.A., USC; Ph.D., Caltech.
- VAZQUEZ-CELAYA, SANDRA, Instructor, Division of Mathematics and Computer Science. A.A., Mt. San Antonio College; B.A., M.S., CSU Los Angeles.
- VENDRASCO, MICHAEL J., Instructor, Division of Natural Sciences. B.A., UC Santa Barbara; Ph.D., UCLA.
- VENTO, PAULA, Instructor, Division of Health Sciences. B.S., California State Polytechnic University; M.S.N., University of Phoenix.
- VENTURA, AGNES, Instructor, Division of Mathematics and Computer Science. B.S., M.A., Debreceni Egyetem, Hungary.
- WAHL, MARY KATHRYN, Librarian II, Library. B.A., Chapman University; M.L.I.S., San Jose State University.
- WALKER, ARMIA CHAVECE, Counselor, Counseling. B.A., UCLA; M.S., University of La Verne.
- WALKER, JAMAAR, Counselor, Counseling. A.A., San Jose Community College; B.S., M.A., Northeastern University.
- WALLACE, BRENNAN, Instructor, Division of Natural Sciences. B.A., M.A., CSU Fullerton.
- WALTER, KRISTA, Associate Professor, Division of English. B.A., University of Michigan; M.A., Ph.D., UC Irvine.
- WARNER, JASON, Instructor, Division of Natural Sciences. B.S., UCLA; M.S., CSU Northridge.
- WEI, CATHY J., Professor, Division of English. B.A., National Cheng-Kong University; M.S., Ph.D., USC.
- WEST, CHRISTOPHER D., Assistant Professor, Division of Social Sciences. B.A., UC Berkeley; M.A., Ph.D., USC.
- WEYDAHL, ERLEND, Assistant Professor, Division of Mathematics and Computer Science. B.S., M.S., Florida International University; M.S., CSU Los Angeles.
- WHITWORTH, MARK T., Instructor, Division of Performing and Communication Arts. B.A., M.A., CSU Los Angeles.
- WILBUR, BRYAN C., Assistant Professor, Division of Natural Sciences. B.S., UCLA; Ph.D., University of Texas, Austin.
- WILKINSON, PAUL, Professor, Division of Business, A.S., B.S., Loma Linda University; M.S. UC Riverside; Ph.D., University of Durham, United Kingdom.
- WILLHIDE, MELANIE, Assistant Professor, Division of Visual Arts and Media Studies. A.S., Manchester Community College, CT; B.F.A., Rhode Island School of Design, RI; M.F.A., Yale University School of Art, CT.
- WILLIAMS, CHARLOTTE M., Assistant Professor, Division of Social Sciences. A.A., PCC; B.A., UCLA; M.P.A., American University.
- WILLIAMS, KEITH, Instructor, Division of English. B.A., M.A., University of Calgary; M.A., Cornell University; Ph.D., Cornell University.
- WILLIAMS, RHONDA, Instructor, Noncredit Division. B.A., University of Southern California; M.A., Pepperdine University.

WOOD, DEBRA W., Assistant Professor, Division of Natural Sciences. B.S., Columbia Union College; M.S., UC Riverside; M.A., CSU Los Angeles.

WU, EUGENIA, Associate Professor, Division of Languages. B.A., Tamkang University; M.A., CSU Northridge, CSU Sacramento.

WU, XIU-ZHI, Professor, Division of Languages. B.A., National Kaohsiung Normal University, Kaohsiung, Taiwan; M.A., National Taiwan Normal University, Taipei, Taiwan; M.A., Ph.D., USC.

WURST, SONIA K., Professor, Division of Business. B.S., University of Dubuque; M.A., Azusa Pacific University; M.A., CSU Fullerton; Ph.D., University of LaVerne.

YAMAGUCHI, DAISUKE DICE, Instructor, Division of Visual Arts and Media Studies. B.S., ArtCenter College of Design.

YANAGA, BARRON, Associate Professor, Division of Business. B.S., M.A., USC; M.B.A., University of Rochester, N.Y.; J.D., USC.

YANG, SEUNG, Assistant Professor, Division of Business, Bachelor of Landscape Architecture, California Polytechnic State University, San Luis Obispo; M.S., Azusa Pacific University.

YANG, ROGER, Assistant Professor, Division of Mathematics and Computer Science. B.A., Cornell University; Ph.D., UC Irvine.

YEGANOV, NIKOLAY, Assistant Professor, Division of Mathematics and Computer Science. B.S., M.A., Azerbaijan Pedagogical Institute; M.S., CSU Los Angeles.

YOUNG, PHILLIP, Instructor, Division of Performing and Communication Arts. B.M., University of the Pacific, Stockton, CA; M.M., Peabody Conservatory of Music, Baltimore, MA; D.M.A., USC.

YOUSEFIAN, AVO MASIHI, Instructor, Division of Business. A.A., Glendale College; B.S., M.S., CSU Los Angeles.

ZARATE, ELOY, Assistant Professor, Division of Social Sciences. A.A., PCC; B.A., M.A., UC Riverside.

ZUNIGA, DESIREE, Counselor, Counseling and Career Services. A.A., A.S., PCC; B.A., CSU Long Beach; M.A., CSU Dominguez Hills.

EMERITI

ABBEY, NORMAN C., Professor Emeritus, Division of Art. B.A., UCLA; M.A., CSU Los Angeles.

ANDERSON, PAULINE C., Professor Emeritus, Chairperson, Department of Allied Health. C.D.A., USC; A.A., PCC; B.V.E., M.A., CSU Los Angeles.

ANGELONI, ELVIO V., Professor Emeritus, Division of Social Sciences. B.A., M.A., UCLA; M.A., Loyola Marymount University.

ARA, PILAR, Professor Emeritus, Division of Languages. B.A., M.A., UC Irvine.

BALLARD, RAE G., Professor Emeritus, Division of English and Foreign Languages. B.A., Reed College; M.A., UC Berkeley; Ph.D., Claremont Graduate School.

BARBER, DENNIES T., Professor Emeritus, Division of Performing and Communication Arts. B.A., M.A., USC; M.A., Pacific Oaks College.

BAUM, LAUREL R., Professor Emeritus, Division of Mathematics and Computer Studies. A.A., PCC; B.A., UC Berkeley; M.A., CSU Los Angeles.

BICKLEY, JAMES B., Professor Emeritus, Division of Social Sciences. B.A., UC Riverside; M.A., CSU Los Angeles; Ph.D., California School of Professional Psychology.

BLECKMANN, WILHELM A., Professor Emeritus, Division of Visual Arts and Media Studies. B.A., M.A., USC.

BOWLUS, ROBERT G., Professor Emeritus, Division of Natural Sciences. B.S., Caltech; M.S. Ed., USC.

BRAVENDER, SUZANNE A., Professor Emeritus, Division of Art. B.F.A., M.F.A., Otis Art Institute.

BRINEGAR, DONALD L., Professor Emeritus, Division of Performing and Communication Arts. B.M., M.M., USC.

BRANZBURG, JUDITH V., Professor Emeritus, Division of English. B.A., University of Rochester; M.A., S.U.N.Y. Stony Brook; Ph.D., University of Massachusetts.

BROWN, GORDON F., Professor Emeritus, Division of Social Sciences. A.A., PCC; B.A., M.A., CSU Los Angeles; Ph.D., USC.

BURCH, VANCE L., Professor Emeritus, Division of Social Sciences. B.S., M.S., Kansas State College.

BURKARD, MARTHA R., Professor Emeritus, Division of Life Sciences and Allied Health. D.D.A, A.A., John Muir College; B.V.E., CSU Los Angeles; M.A. CSU Long Beach.

BURRUSS, LAURIE L., Professor Emeritus, Division of Visual Arts and Media Studies. B.F.A., USC; M.F.A., USC.

CARTER, BRUCE A., Professor Emeritus, Division of Natural Sciences. B.S., M.S., Ph.D., Caltech.

CHANDLER, FAY E., Professor Emeritus, Division of English and Foreign Languages. B.S., East Tennessee State College; M.A., East Tennessee State University.

CHAPMAN, WILLIAM H., Professor Emeritus, Division English and Foreign Languages. B.A., University of Dayton; M.A., St. John's University.

COLE, ROBERTA C., Professor Emeritus, Division of Health Sciences. A.A., Los Angeles Valley College; B.S., M.S., CSU Los Angeles.

CONKLIN, BRUCE E., Professor Emeritus, Division of Social Sciences. B.S., M.A., University of Illinois; Ph.D., USC.

CORDON, MARY JANE, Professor Emeritus, Division of Mathematics and Computer Studies. B.A., St. Mary-of-the-Woods College; M.S., Dayton University; M.A., Loyola Marymount University.

COREY, ALICE S., Professor Emeritus, Division of Natural Sciences. B.S., M.S., University of Michigan.

DABELOW, KATHRYN W., Professor Emeritus, Division of Social Sciences. A.A., PCC; B.A., M.A., UC Santa Barbara.

DAVIS, LAURA L., Professor Emeritus, Division of Social Sciences. B.A., M.A., CSU Los Angeles; M.A., USC

DAVIS, LISA F., Professor Emeritus, Division of Social Sciences. B.A., M.A., CSU San Jose; Ph.D., USC.

DI MASSA, JOSEPH F., Professor Emeritus, Division of Social Sciences. B.A., M.A., St. John's College; Ph.D., USC.

DOUD, ROBERT E., Professor Emeritus, Division of Social Sciences. B.A., Cathedral College; M.A., DePaul University; Ph.D., Claremont Graduate School.

EATON, JR., CLYDE B., Professor Emeritus, Division of Mathematics and Computer Studies. A.A., PCC; A.B., M.A., UC Berkeley; M.A., M.L.S., M.S., Ph.D., UCLA.

FASTABEND, MARGARITA D., Professor Emeritus, Division of Foreign Languages. B.A., CSU Los Angeles; M.A., USC.

FINKENBINDER, MICHAEL A., Division Dean and Professor Emeritus, Division of Social Sciences. B.A., M.A., CSU Los Angeles; Ph.D., USC.

FRANK, RUSSELL A., Professor Emeritus, International Education, Student Affairs. B.A., Northern Illinois University; M.A., Ph.D., UCLA.

GILES, BRYANT W., Professor Emeritus, Division of and Foreign Languages. B.A., Stanford; M.A., Ph.D., Yale.

GOLDMANN, WILLIAM E., Professor Emeritus, Division of Social Sciences. B.A., USC; M.A., CSU Los Angeles; Ph.D., USC.

GRAINGER, WILLIAM K., Professor Emeritus, College Library Services. B.A., B.L.S., UC Berkeley; M.L.S., USC.

GRAY, VELMA L., Professor Emeritus, Division of Health Sciences. R.N., Kahler School of Health Sciences; B.S., M.A., CSU Los Angeles.

HAGER, MARTHA H., Professor Emeritus, Division of Health Sciences, B.S., M.S., M.A., CSU Los Angeles.

HALLINGER, JANE L., Professor Emeritus, Division of English. B.A., DePauw University; M.A., Indiana University; M.A., CS U Los Angeles.

HALEY, DANIEL J., Professor Emeritus, Librarian II, Library Services. B.S., U.S. Naval Academy; M.L.S., UCLA; Ph.D., UCLA.

HERINGER, VIRGINIA J., Professor Emeritus, Division of Languages. B.A., M.A., Ohio State University.

HERTZ, HOWARD L., Professor Emeritus, Division of English. B.A., University of Chicago; M.A., Boston University; Ph.D., University of Texas.

- HILL, H. STANTON, Professor Emeritus, Division of Natural Sciences. B.A., Pomona College; M.A., Claremont Graduate School.
- HIRAI, RITSUKO, Professor Emeritus, Division of Languages. B.A., Kyoto University (Japan); M.A., Ph.D., USC.
- HOLGERSON, KAREN M., Professor Emeritus, Division of Languages. B.A., University of Wisconsin; M.A., University of Minnesota; M.A., Ph.D., Claremont Graduate School.
- JACKSON, BETTY R., Professor Emeritus, Division of Health Sciences. A.A., PCC; B.A., University of Redlands; M.S., University of LaVerne.
- JAMES, VIRGIL T., Professor Emeritus, Division of Engineering and Technology. A.A., PCC; B.A., CSU Los Angeles; M.A., CSU Long Beach.
- JOHANNSEN, LAWRENCE A., Professor Emeritus, Chairperson, Division of Engineering and Technology. B.S., University of Wisconsin; M.A., University of Redlands, Ed.D., UCLA.
- JOHNSON, LANCE K., Professor Emeritus, Division of Social Sciences. A.A., PCC; B.A., M.A., CSU Long Beach; Ph.D., USC.
- JORIF, IVONNE T., Professor Emeritus, Division of Health Sciences. B.S., M.S., CSU Los Angeles.
- JUSTER, NORMAN J., Professor Emeritus Division of Natural Sciences. B.A., M.S., Ph.D., UCLA.
- KAWAHARA, HARRY, Professor Emeritus, Counseling Services. B.A., UC Berkeley; M. Div., Fuller Seminary and Graduate School.
- KEELER, TERESA F., Professor Emeritus, Division of English. B.A., Mount St. Mary's College; M.A., Ph.D., UCLA.
- KIM, JOANNE Y., Librarian III and Professor Emeritus, Library Services. B.A., M.A., Ewha Women's University (Korea); M.A., University of Colorado; M.L., University of South Carolina.
- KINGMAN II, JAMES, Professor Emeritus, Division of Social Sciences. A.A., John Muir College; B.A., M.A., UCLA.
- KOLTS, DOROTHY K., Professor Emeritus, Division of Communication. B.A., University of Oregon; M.A., USC.
- KOVACS, BETTY H., Professor Emeritus, Division of English and Foreign Languages. B.A., M.A., Ouachita Baptist Colleges (Arkansas); Ph.D., UC Irvine.
- LAMSON, ALAN M., Professor Emeritus, Division of English. B.A., UCLA; M.A., CSU Los Angeles.
- LAU, LILY H., Professor Emeritus, Division of Health Sciences. B.S., M.S., CSU Los Angeles; Ed.D., USC.
- LEARY, DAVID T., Professor Emeritus, Division of Social Sciences. A.B., A.M., Stanford; M.A., Ph.D., USC.
- LEE, GREGORY K., Professor Emeritus, Division of Business. B.A. University of Arizona, Tucson; M.A., University of North Dakota, Grand Forks.
- LEE, JO ANN, Professor Emeritus, Division of Business. B.A., M.A., CSU Los Angeles; M.S., Pepperdine University; Ed.D., Nova University.
- LYNN, PATRICIA R., Professor Emeritus, Division of Business and Computer Technology. A.A., PCC; B.A., M.A., CSU Los Angeles; Ed.D., USC.
- MACFARLANE, RUTH, Professor Emeritus, Division of Social Sciences. B.A., University of Michigan; M.A., Stanford; Ph.D., Claremont Graduate School.
- MCGUIRE, KAREN E., Professor Emeritus, Division of English. A.A., PCC; M.A., CSU Los Angeles; Ph.D., USC.
- McLEAN, ROBERT E., Professor Emeritus, Division of Social Sciences. B.A., M.A., UC Santa Barbara; M.A., UC Riverside.
- MEYER, DIETRICH A., Professor Emeritus, Division of Mathematics and Computer Studies. B.A., UC Berkeley; M.A., CSU San Francisco; M.S., West Coast University.
- MIEDEMA, KENNON G., Professor Emeritus, Division of Social Sciences. B.A., M.A., CSU Los Angeles.
- MITOMA, DONA J., Professor Emeritus, Library Services. A.B., UCLA; M.S.L.S., USC; M.S., CSU Northridge; M.A., CSU Los Angeles.
- MOORE, JESSIE MAE, Professor Emeritus, Division of Kinesiology, Health and Athletics. B.S., Tennessee State University; M.S., CSU Fullerton.
- MUNOZ, FLORENCE L., Professor Emeritus, Division of Health Sciences. B.S., Baguio Colleges Foundation, Philippines; M.S., CSU Los Angeles.

NAVARRO, ROBERT D., Professor Emeritus, Division of Engineering and Technology. B.A., M.A., CSU Los Angeles; M.A. Point Loma College.

NORHEIM, CAROL J., Professor Emeritus, Division of Communications. B.A., Pasadena College; M.A., CSU Los Angeles.

OHLSSEN, H. WOODROW, Professor Emeritus, Division of English. B.A., Lawrence College; M.A., University of Michigan.

O'HORA, JILL, Professor Emeritus, Division of English. B.A., University of Santa Clara; M.A., Ph.D., University of Toronto.

ORTELL, EDWARD C., Professor Emeritus, Division of Business and Computer Technology. B.S., University of Dubuque; M.S., State University of New York; Ph.D., California Western University.

PINCHUK, EUGENE, Professor Emeritus, Division of Business and Computer Technology. B.S., M.B.A., CSU Los Angeles; Ed.D., Nova University.

POLENZANI, ELIZABETH, Professor Emeritus, Division of Business and Computer Technology. B.A., Mundelein College; M.B.A., California State Polytechnic University, Pomona.

POTTER, DOROTHY F., Professor Emeritus, Library Services. A.A., PCC; B.A., UCLA; M.S.L.S., USC.

PROANO-GOMEZ, MARIA, Professor Emeritus, Division of Languages. B.A., Catholic University, Quito, Ecuador; M.A., CSU Los Angeles; Ph.D., Catholic University, Quito, Ecuador; Ph.D., UC Irvine.

PROBST, JOSEPH M., Professor Emeritus, Division of Performing and Communication Arts. B.A., M.A., CSU Long Beach.

RAMIREZ, ARNOLD A., Professor Emeritus, Counseling Services. B.S., M.A., Northern Arizona University.

REID, JOEL O., Professor Emeritus, Division of Social Sciences. B.S., New York University; M.A., Montclair State College; Ph.D., Claremont Graduate School.

REINHARTSEN, LEE L., Professor Emeritus, School of Humanities and Social Sciences. B.A., CSU Humboldt; M.A., CSU Northridge.

RICARDS, PHILIP C., Professor Emeritus, Division of Social Sciences. B.A., UC Santa Barbara; M.A., Ph.D., Claremont Graduate School.

RIHERD, JAMES M., Professor Emeritus, Division of English. B.A., UCLA; M.A., CSU Los Angeles; Ph.D., USC.

SALOMON, PHIL M., Professor Emeritus, Division of Business and Computer Technology. A.A., Los Angeles City College; B.S., M.S., M.E., UCLA; M.A., CSU Northridge.

SAVAS, DIANA N., Professor Emeritus, Division of Languages. B.A., Oberlin College; M.S., Cornell University; Ph.D., UCLA.

SAVOIE, PATRICIA O., Professor Emeritus, Division of English. B.A., Luther College; M.A., University of Alabama.

SILTEN, RUTH G., Professor Emeritus, Division of Foreign Languages. B.A., M.A., UCLA.

SINK, ROLAND E., Professor Emeritus, Division of Business Education. B.S., M.S., USC.

SMITH, PAUL W., Professor Emeritus, Division of Communication. B.A., Baker University; M.A., Ph.D., USC.

STAUB, PATRICIA J., Professor Emeritus, Division of Performing and Communication Arts.. B.A., Arkansas State University; M.A., Southern Illinois University.

STROUD, DUKE S., Professor Emeritus, Division of Performing and Communication Arts. B.A., UC Berkeley; M.A., CSU Los Angeles.

TULLEY, JOHN E., Professor Emeritus, Special Services. B.A., UCLA; M.S., Ed.D., USC.

VARGAS, ALICIA, Professor Emeritus, Division of Business, B.S., M.S., CSU Los Angeles.

VICKERS, MARJORIE H., Professor Emeritus, Division of Life Sciences. B.S., Ph.D., University of London.

VOLCKMANN, JEAN P., Professor Emeritus, Division of Social Sciences. B.A., Grinnell College; Ph.D., Indiana University.

WALDON, STENNIS H., Professor Emeritus, Division of Music. B.M., University of Redlands; M.M., University of Michigan.

WATSON, S. CHRYSTAL, Professor Emeritus, Division of Performing and Communication Arts. A.A., PCC; B.A., M.A., CSU Los Angeles.

WONG, DANIEL M., Professor Emeritus, Division of Natural Sciences. B.S., UC Berkeley; Ph.D., UCLA.

WOODS, GARY L., Professor Emeritus, Division of Business and Computer Technology. A.A., PCC; B.S., M.S., USC; J.D., Southwestern University.

WORLEY, MARGARET R., Professor Emeritus, Division of Social Sciences. A.B., Stanford University; M.A., CSU, Chico.

WRIGHT, ROBERT L., Professor Emeritus, Division of Performing and Communication Arts. B.S., Northwestern University; M.A., Loyola University; Ph.D., UCLA.

WU, RUOYI, Professor Emeritus, Division of English, B.A., Inner Mongolia Teacher's University (China); M.A., Northeast Missouri State University; Ph.D., University of Louisville.

YAMAUCHI, KENT T., Professor Emeritus, Office of Special Services. B.A., M.S.W., USC; M.A., Ph.D., California School of Professional Psychology.

YEE, KAY Y., Professor Emeritus, Division of Visual Arts and Media Studies. A.A., San Francisco City College; B.F.A., California College of Arts and Crafts; M.F.A., CSU Long Beach.

PASADENA CITY COLLEGE
CATALOG
2019-2020

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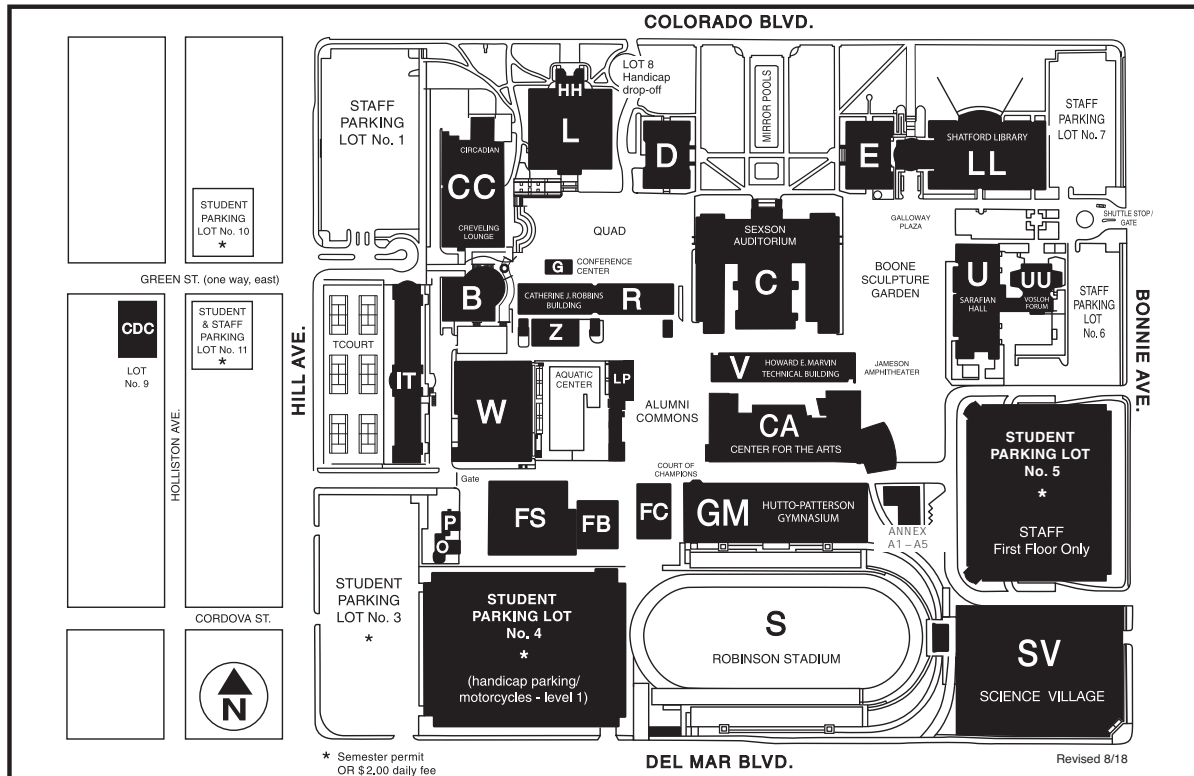
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- Community Education Center (CEC)**
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■ Child Development Center (CDC)
 1324 E. Green St., Pasadena, CA 91106 • (626) 585-3180

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